TECHNOLOGY DEPARTMENT

NATIONAL PETROLEUM NEWS

November 10, 1948
Vol. 40—No. 45

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DETROIT

What Determines a Gasoline Price?

A detailed article, crammed with practical facts, tells the story of gasoline pricing in a large state, and the first of four installments of it starts on page 26 of this week's National Petroleum News.

Based upon a year-long study of tank wagon and retail pricing of Standard Oil Co. (Ohio), the article was prepared for the current issue of the *Harvard Business Review* by Edmund P. Learned, business consultant and professor at Harvard's Graduate School of Business Administration. Because the article speaks practical oil marketing language, NPN is printing it in full in four weekly chapters.

Recent decisions of the Federal Trade Commission and the Supreme Court on pricing in other industries and the effect last week's election could have on all business, especially oil, make Dr. Learned's report as timely as it is interesting.

The first installment tells the background of the article and includes a summary of policy by the company's marketing vice president. Subsequent installments will deal with such topics as price wars, dealer relations, comparison with other markets, the effect of local competition upon statewide prices.

API Meeting and Jobber Council Coverage

For complete coverage of the news at the American Petroleum Institute and National Oil Jobbers Council meetings in Chicago this week, written by NPN staff writers and transmitted by NPN's leased wire, see the News Section.

Should Heating Oil Be De-Emphasized?

Paper at API meeting in Chicago raises this question in connection with discussion of the roles of oil, natural gas and coal in the national economy. The economics of fuels is discussed. P. 39.

Avoiding Contamination of Oil Products

The oil industry is constantly on the alert to avoid intermixtures of products to control, among other things, quality and flammable point. API paper discusses problems particularly in the tank vehicle handling of petroleum products. P. 52.

Good things to do before Winter sets in —

1. Drain and shut off outside water pipes.

2. Repair and repaint fences, drums, outside metal work.

3. Clean and inspect heating plant, chimney, etc.

4. Replace outworn, uninviting signs.

5. Clean all light bulbs, replacing dead ones.

6. Set up display of winter accessories.

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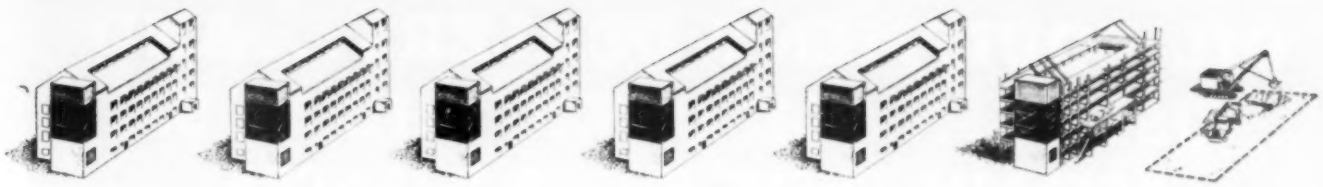
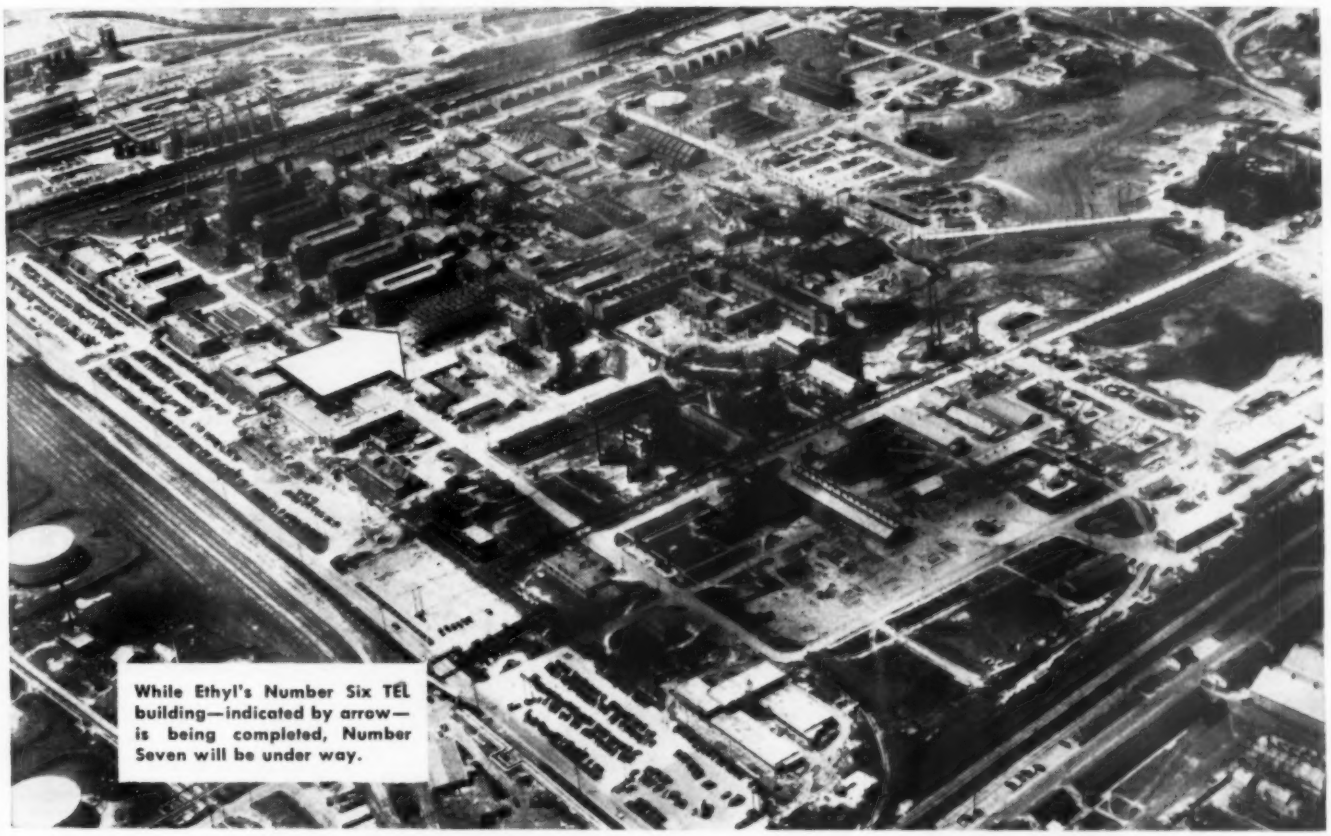


ETHYL STARTS SEVENTH *TEL* PLANT



While Ethyl's Number Six TEL building—indicated by arrow—is being completed, Number Seven will be under way.

Refiners' demand for antiknock fluid to be met by "additional addition." Seventh Ethyl TEL plant started as sixth approaches completion.

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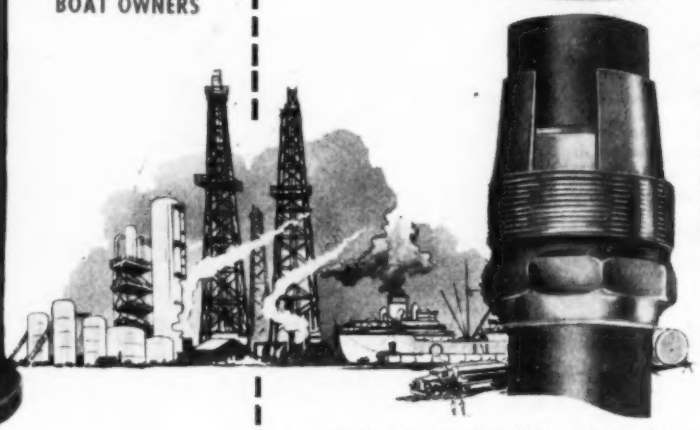

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NATIONAL PETROLEUM NEWS

Vol. 40—No. 45 ESTABLISHED 1909 **November 10, 1948**

THE NEWS WEEKLY OF THE OIL INDUSTRY

COMING MEETINGS

NOVEMBER

American Petroleum Credit Assn., meeting, Roosevelt Hotel, New Orleans, La., Nov. 15-17.
Alabama Petroleum Assn., meeting, Whitlet Hotel, Montgomery, Ala., Nov. 18.
Montana LPGA Convention, Billings, Mont., Nov. 19-20.
American Society of Mechanical Engineers, meeting, Hotels New Yorker and Pennsylvania, New York City, Nov. 28-Dec. 3.

DECEMBER

Asphalt Institute, annual meeting, Engineers' Club, New York, N. Y., Dec. 1.
American Assn. of Petroleum Geologists, regional meeting, Houston, Texas, Dec. 2-3.
Oil Dealers' Assn. of Arkansas, meeting, Hotel Marion, Little Rock, Ark., Dec. 7.
Wisconsin LP-Gas Assn., meeting, Wisconsin Rapids, Wis., Dec. 7.
Nebraska Petroleum Marketers Assn., meeting, Hotel Paxton, Omaha, Neb., Dec. 7-8.
Arkansas Independent Oil Marketers Assn., convention, Lafayette Hotel, Little Rock, Ark., Dec. 8.
Independent Oil Marketers Assn., annual convention, Lafayette Hotel, Little Rock, Ark., Dec. 8.
Interstate Oil Compact Commission, annual meeting, Allis Hotel, Wichita, Kans., Dec. 9-11.

JANUARY, 1949

Society of Automotive Engineers, annual meeting and engineering display, Book-Cadillac Hotel, Detroit, Mich., Jan. 10-14.
North Carolina Oil Jobbers Assn., meeting, Hotel Carolina, Raleigh, N. C., Jan. 12.
Kansas Oil Men's Assn., meeting, Hotel Lassen, Wichita, Kan., Jan. 17-18.
Georgia Independent Oilmen's Assn., meeting, Hotel Dempsey, Macon, Ga., Jan. 20.
International Heating and Ventilating Exposition, International Amphitheatre, Chicago, Ill., Jan. 24-28.
Northwest Petroleum Assn., meeting, Nicollet Hotel, Minneapolis, Minn., Jan. 26-27.

FEBRUARY

Kentucky Petroleum Marketers Assn., meeting, Brown Hotel, Louisville, Ky., Feb. 8-9.
Illinois Petroleum Marketers Assn., meeting, Hotel Pere Marquette, Peoria, Ill., Feb. 15-17.
Iowa Independent Oil Jobbers Assn., meeting, Hotel Fort Des Moines, Des Moines, Iowa, Feb. 22-24.
American Society for Testing Materials, meeting, Hotel Edgewater Beach, Chicago, Ill., Feb. 28-March 4.

MARCH

Wisconsin Petroleum Assn., meeting, Hotel Schroeder, Milwaukee, Wis., March 1-2.
American Society of Training Directors, meeting, Hotel Carter, Cleveland, O., March 3-5.
Missouri Petroleum Assn., annual convention and trade exhibit, Hotel President, Kansas City, Mo., March 9-10.
American Petroleum Institute, Division of Production: **Southwestern District** meeting, Galvez Hotel, Galveston, Texas, March 9-11.
Mid-Continent District meeting, Mayo Hotel, Tulsa, Okla., March 23-25.
Western Petroleum Refiners Assn., meeting, Plaza Hotel, San Antonio, Texas, March 28-30.
Society of Automotive Engineers, Transportation meeting, Statler Hotel, Cleveland, O., March 28-30.
Ohio Petroleum Marketers Assn., meeting, Deshier-Wallick Hotel, Columbus, O., March 29-31.

Contents

NEWS SECTION 11

FEATURE INDEX

GASOLINE PRICING—The story of gasoline pricing by one major company in one state is told by a Harvard professor and business consultant. First of four installments includes a summary of policy by the company's marketing vice president 26

DE-EMPHASIZE HEATING OILS?—This question was raised in a paper presented at the API meeting in connection with a discussion of the roles of oil, natural gas and coal in the national economy 39

AVOIDING CONTAMINATION OF PRODUCTS—API paper discusses problems in connection with guarding against intermixture of petroleum products with resultant change in quality and flame point 52

AIRCRAFT FUELING SYSTEM—Network of hydrants which are connected to mobile pumper puts aircraft fueling on a fire department type operation 60

DEPARTMENTS

About Oil People 74
Advertisers' Index 80
Ahead of the News 5
Editorial 23
Markets 63
Midwest Comment 7
Oil Prices 66
Pacific Coast Comment 9
Statistics 72
Washington Comment 7

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AHEAD *of the* NEWS

ANOTHER CRISIS?—Continuing warm days in the east, coupled with prognostications by various so-called weather prophets of a mild winter, are causing some marketing people—with heating oil storage now filled to capacity—to knock on wood and practice whistling in the dark. Storage problem has gotten so bad for some that there now is some talk of cutting back refinery runs. All of which leads to inevitable talk of a price fall-off this winter, a matter which is being discussed in far-from jocular tones in some circles. Some suppliers still are allocating. District 1 NPC is getting some complaints from dealers and jobbers, but others who should be equally qualified to forecast are talking about another winter crisis—but of quite a different stripe.

●

ABOUT FACE—Industry opinion which four or five months ago foresaw refining capacity becoming a bottleneck in supply now is switching around to the view that no such bottleneck will develop. The possibility of trouble in this direction was held out last July by Dr. Robert E. Wilson (Indiana Standard) in a report to the NPC, but the fact that refining capacity now appears in better relationship to required runs has materially brightened the outlook.

●

MILITARY CUSHION—A decision by the military to establish a reserve of refined products for use in an emergency may not be far away. It hinges principally on the question of storage, and the armed forces now are making a concerted effort to acquire that, by lease or purchase. A committee has been formed which will solicit and negotiate for the extra tankage, then allocate it among Army, Navy and Air Force. Committee chairman is Colonel L. E. Cotulla, executive officer of Armed Services Petroleum Purchasing Agency.

●

CRACKING CRACK—The Justice Department just might cut loose one of these days with a suit against the way cracking patents are held. Attorney General Tom Clark tried hard to get such a case into the courts when he was in DJ's Antitrust Division but ran into opposition inspired by British need for 100 octane gasoline. The other day, he referred to "the cracking process case" as though it was getting departmental attention in reiterating that the dormant API "Mother Hubbard" suit will not be pushed, but segments of it will.

TWO FOR ONE—In his annual address this year, API President Boyd frankly said that he is thinking of the time when he will step out of his present position. There is talk that when this happens, the API will return to its one-time practice of electing honorary presidents and having an executive vice president to handle administration of the institute.

●

MISDEAL—Oil marketing men see the confusion caused by the Federal Trade Commission and Supreme Court pricing decisions as one of the biggest problems resulting from the re-election of President Truman and the election of a Democratic congress. The position of the FTC and Supreme Court seemed to them to be so untenable that few doubted passage of legislation to clarify the situation—if the GOP had gone into power. Now, however, regardless of the merits of the issue, there appears to be little hope that a New Deal Congress will enact a law reversing a New Deal FTC and a New Deal Supreme Court.

●

WAX WORRIES—Outlook for wax is anything but rosy, according to most marketing sources. With sales slow and demand sluggish, wax stocks now are mounting at the rate of 10 million lbs. per month. The figure is especially startling when viewed in the light of already record-high inventories. Wax prices, which have declined steadily during the last six months, are due for further descent according to marketers. They point to recent major company bid of 5.3c, New York, on government tender for white crude scale.

●

WAVE OF THE PAST—Slow-up in construction of new buildings—with elaborate lube equipment—by automobile dealers is the forecast being made by some equipment men. The postwar wave of new construction in this field, they say, was stimulated by the attitude of car manufacturers who were inclined to allot cars in larger numbers to better equipped dealers, and now has reached its peak.

●

TAX HOPE—Senator Murray, Democrat from Montana, re-elected last week and slated to be top man on the Senate Small Business Committee if it is continued in next Congress, is reported on Capitol Hill to be considering sponsorship of measures aimed at wiping off the statute books federal taxes on pipe line transportation, as well as U. S. excise levies on lube oils, tires and tubes.

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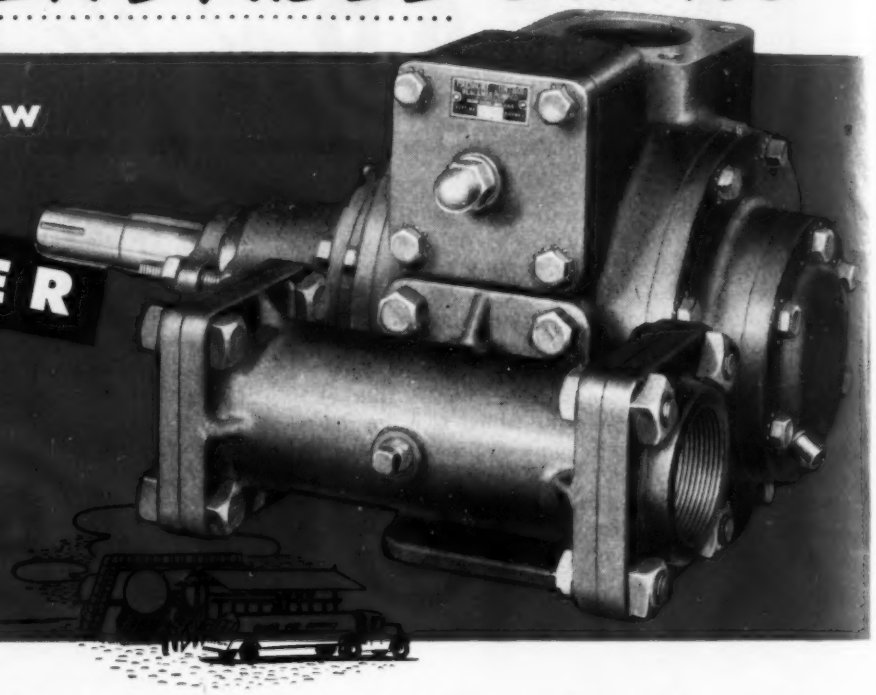

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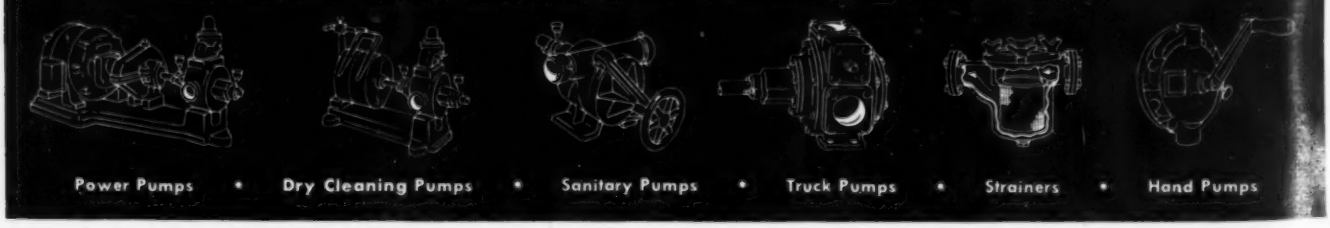

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Mr. Yocom

WASHINGTON—By Herbert A. Yocom

Truman Should Like Krug For Service in Campaign

After picking Dewey to win, the Washington "experts" now are guessing that President Truman will kick Interior Secretary Krug, among others, out of his cabinet come next Jan. 20.

The reason, they say, is that the secretary didn't help Mr. Truman in the campaign. They have gone so far already as to hit on Oscar L. Chapman, currently the undersecretary and a key cog in the election machine, as Krug's most likely successor.

What these so-called experts apparently don't know or, knowing, are ignoring, is that Krug spent the six weeks preceding Nov. 2 on an "inspection" tour of the west, during which he spoke to conservation, irrigation, minerals and other groups in nine states. And what do you think he talked about? Why of all the things the government has done for the west in the past 16 years and of all its plans for the future.

In other words, the secretary was engaging in the most effective sort of campaigning imaginable. That it paid off is attested by the fact that Truman carried all of the nine states visited. So, all the experts to the contrary, if Krug is in the Truman dog house it must be for reasons other than that he didn't tell the folks outright to vote the Truman-Barkley ticket. And offhand, this corner can't imagine what a single one of those reasons might be, Mr. Krug having even been a good enough soldier as to go down the line last winter in support of the President's price and rationing control proposals, much as he may have thought them unnecessary.

This is not saying, of course, that Krug may not drop out of the cabinet of his own volition. Nor does it foreclose the possibility that Truman may move him into some other job. The chairmanship of the National Security Resources Board, for example, where his experience as War Production Board head would be of value in mobilization planning.

As to who might succeed him, in either eventuality, Oscar Chapman is a natural. Not only does he know Interior from top to bottom, having been in the little cabinet since 1933, but Truman is now everlastingly in his debt for his yeoman service in the recent campaign. So what better way to pay off than to promote him to secretary.

* * *

Fact that what some describe as "another West Texas" appears to be opening up in Alberta Province is being talked about increasingly in Washington.

There are a few here, indeed, who regard the Leduc development and the Red Water and other discoveries as of such tremendous significance as actually to have lessened the urgency of the U. S. pressing for the rapid development of the oil resources of other Western Hemisphere countries.

This thinking is not yet shared by the military, nor was it to be expected that it might. The military believe always in being 300% safe. So there probably will be no let up on their part.

But to the extent that it does exist, that perhaps is an ominous sign for certain of our neighbors to the south. Mexico particularly might be concerned. Because it just could be that this new "oil anchor to leeward" in Canada—as one here calls it—is the sort of thing that will render even less secure Mexico's bargaining position in the hemispheric oil picture.

Mr. Castle

MIDWEST—By Leonard Castle

Jobber Leader Suggests Independent Progress Day

H. H. Hahn, secretary of the Nebraska Petroleum Marketers, Inc., suggests that Independent jobbers sponsor an "Independent Oil Jobbers Progress Day" similar to Oil Progress Day which was staged so successfully throughout the nation by the industry generally on Oct. 14.

Mr. Hahn says that Independent jobbers, at least in the Midwest, should join together in setting aside one day, or possibly a week, to tell their customers what the Independent jobber has accomplished and his role in keeping them supplied with products.

Such a campaign, he says, "could awaken a keener, more personal public interest in the oil industry than the more general—and less challenging—theme of the event just passed."

"And why not? After all, who was it that scoured the country far and near for products to supply the fuel and comfort needs of the consumer during the period of snortages?" Mr. Hahn asks.

"Call it 'black' or 'gray', or any other kind of a market you choose, but the fact remains there were products there and they could be bought —at a price. Often, yes very often, it was the only source of additional products. And the car, truck and home owners needed those products.

"It was the Independent jobbers who flocked to this one open market and got the products for his customers," Mr. Hahn says. "It was the Independent jobbers who discarded all thought of gain—and sacrificed profits in the interests of service. Many suffered losses in the sale of the products, bought at a premium and sold in a market 'made' by others."

By and large, Mr. Hahn says, the Independent jobber kept faith with his customers, supplying the needed products when, where and as they were needed and frequently at a net loss.

"All honor to the producers and refiners. They have done well—and have substantial profits as their reward. Let's plant roses along the pipe lines and festoon flowers over the tank cars and barges.

"But, why not also designate a day to the Independent oil jobbers of the nation—especially those in the Middle West. A day to honor them for what they have done—and for what they are. A day to offer a few bouquets—and perhaps a slight increase in margins—in recognition of their courage, their enterprise, their services and their sacrifices in the dark days of scarcity, of shortages—and allocations."

* * *

One major company is telling its jobbers and dealers that they can stimulate battery sales and give their customers a better deal by pointing out in the sales talks that prices of batteries have increased at a lesser rate than the prices of many other commodities.

Many prospective battery customers are laboring under two misconceptions: 1. That like everything else,

it pays to see DOUBLE when you look at viscosity . . .

. . . for *dual viscosity* sells more oil for you. Your oil meets *two* viscosity grades at once, for example a 10W-20 or a 20W-30—and your dealer satisfies *all* lubricating requirements with fewer grades in stock. There's a convenience guaranteed to simplify selling—for him and for *you*.

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all batteries are high priced today, and, 2. That a lighter battery will get them through the tough winter months at less cost.

To refute the belief that batteries are expensive, the company cited comparative price figures as listed by the labor bureau. Since 1939, these figures show, the price of storage batteries has increased 85.3%. Comparative price increases of other commodities during the nine year period included:

Lead, 249.2%; petroleum products, 134%; antimony, 182.4%; labor, 121.5%; building materials, 116.8%; motor vehicles, 76.1%; copper, 73.6% and iron and steel, 55.7%.

"Now let's see how the customer is fooling himself by purchasing a cheap, light battery to do the job required to keep his car running without trouble," the company's suggestion stated.

"In the first place, few car owners know that the battery that comes originally with the car from the manufacturer is just large enough to do the job without any additional electrical equipment which usually is added to the car later.

"That's where they get fooled. Only a battery designed to carry the extra load of added accessories can give that extra power and longer life. The result of purchasing a lighter battery usually turns into customer dissatisfaction because it can't possibly meet the requirements of a heavy duty battery.

"You can do much toward giving your customers a better battery deal by explaining where the battery market price stands today in comparison with price increases — and pointing out why they are ahead in the long run by purchasing the right battery necessary for their car instead of shopping for a light one hoping it will save them money. It won't work."

Mr. Breese

PACIFIC COAST—By Frank Breese

Viewing the West Coast Strike And Reactions to the Election

The spontaneous reaction of two men in the oil business here typified general labor-management reaction in California to the presidential election.

Ranking official of a major oil company snapped, "What did we ever do to deserve this?"

Official of an OWIU local chortled, "Lovely, lovely. Now let's see what we can do."

Company men expressed concern over the tidelands controversy. Some predicted it will be settled quickly in favor of the federal government. They also forecast increased anti-trust litigation involving oil companies.

The OWIU actively supported Clyde Doyle (D) of Long Beach for 18th district representative in Congress against Willis Bradley (R). Doyle won decisively 103,924 to 90,852. That is a heavily industrial district and the vote reflected a heavy union turnout.

Oil officials derived a degree of satisfaction from the passage of the anti-featherbedding measure (Proposition No. 3) discussed here two weeks ago.

* * *

Although settlements effected this week would appear to decide the complete termination of the CIO oil workers' strike, the situation is not that easy to liquidate. Immediate and long-range complications have set in, the one to delay settlement and the other to threaten it even after the strike is over.

Defection of OWIU members in petitioning the NLRB for decertification privileges in seeking some other bargaining agency to represent them in negotiations with Richfield, Union Oil, Ohio Oil and Lloyd Corp. has threatened to hinder talks. It had been assumed that the strike would quickly end once agreement had been reached between OWIU and one of the companies.

The decertification movement itself may stall a complete wind-up until its status is resolved. In addition, though, the Union Oil-OWIU negotiations have been the most difficult of all. Over the weekend, informed quarters reported that OWIU leaders were studying the advisability of pressing for better terms from Union Oil. They were said to be so greatly cheered by the election outcome that the union's resistance would permit it to hold out. Informed sources reported that both Union Oil management and labor negotiators have been more unyielding than in other companies.

The long-range situation will be affected by pertinent developments, an authortative informant said. First, a strong segment of OWIU is dissatisfied with settlement terms and has voiced this dissatisfaction. Second, union leaders feel their position will be strengthened by the expected repeal or revision of the Taft-Hartley act.

Informed observers said if labor legislation is modified, CIO leaders will re-open negotiations in an effort to gain wage improvements denied them this round.

* * *

The smog problem of Los Angeles last week raised the conflict between the oil industry and smog authorities which is becoming a feud. The Stanford Research Institute, commissioned to study the smog problem by the Western Oil and Gas Assn., issued its first report, covering the first 12 months of its investigation. The report said causes of low visibility and eye irritation, under smog conditions, are unknown.

The report, however, firmly refuted the recent report by Los Angeles County air pollution authorities charging that the petroleum and chemical industries were the chief offenders. The report implied that the motorists were more responsible for smog than gasoline-makers.

The institute reported neither sulfur trioxide, sulfur dioxide nor a number of other compounds are responsible for the eye-irritation aspects of smog (as imputed in the county report). Only two blamed substances are still listed as suspects, namely sulfur (the pure element, not a compound) and a group of chemicals known as aldehydes. Automobile exhaust gases were shown to produce relatively high concentrations of aldehydes as well as elemental sulfur, the report said.

* * *

California oil men heard a report that the U. S. may have to look to Middle East oil to take the pressure off domestic production. The report was made by T. L. Lenzen, general manager of Eastern Hemisphere Operations of the Standard Oil Co. of California.

Mr. Lenzen said success of the Marshall Plan will depend on Middle East oil to revitalize Europe's industry. It will be necessary to continue development of Middle East reserves and also to provide for the transport of crude oil and construction of new refinery capacity in Europe and the Mediterranean, Mr. Lenzen said.

"Unless Eastern Hemisphere oil is developed, Europe will be starved for oil and her recovery retarded, and we in the U. S. shall be pressed to meet our growing domestic requirements," he asserted.

He reported Saudi Arabia crude oil production at 500,000 b/d, more than half of California's total production.

John L. Locke . . . New President of Butane-Propane Assn.

John L. Locke (left), newly elected president of National Butane-Propane Assn., presents a silver-bound gavel to John M. Robinson, retiring president, in appreciation of his service

John L. Locke, who in eight years rose from assistant office manager to president of Northwestern Blaugas Co. of St. Paul, is the new president of National Butane-Propane Assn.

His business career started in 1919 when he became assistant secretary of Yakima Trust Co. of Yakima, Wash. He left this job in May, 1926, to join the Blaugas Co. In 1930 he was elected to the board of directors and became president in February, 1934, upon the death of his father, Frank Y. Locke. He has held the post ever since.

Born on Dec. 23, 1896, in Sibley, Iowa, he later moved to St. Paul and was graduated from the University of Minnesota in 1918. He served on the Mexican border near Brownsville in 1916 with the 1st Minnesota Field Artillery and later with the U. S. Army of Occupation in Coblenz, Germany. He took time out to attend the University of Lyon, France, from January to July, 1919.

The company which Mr. Locke heads was chartered on March 30, 1911, under a license agreement with the Blaugas Corp. of America. Late in 1927 Northwestern Blaugas placed an order for the first car of propane produced and shipped by Phillips Petroleum Co.

During the last war, Mr. Locke served on the LP-Gas Subcommittee of the PAW. He also served as a member of the governor of Minnesota's Fire Prevention Committee and on various industry committees from the NRA period to the present.

Mr. Locke is a member of the Northwest Petroleum Assn., Twin City Petroleum Club, Rotary Club, Osman Temple of the Shrine, St. Paul Athletic Club, Saintpaulites, Inc., Midway Club, St. Paul Assn. of Commerce, Compressed Gas Manufacturers Assn. and Post 450 of the American Legion.

He is a member of the St. Paul Curling Club. He has two daughters and one son, John, Jr., who is attending the University of Minnesota after serving two years in the U. S. Navy. One of his daughters, Mrs. John W. Babcock of Palo Alto, Calif., served in the Waves during the last war.

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$1.85 Million Budget Set For '49 Oil Public Relations

OIIC District Chairmen Unanimously Agree Best Job Can Be Done Only at 'the Grass Roots Level'

By NPN Staff Writers

CHICAGO—Continuation of the oil industry public relations program for another year, with a budget of $1,850,000, approximately the same as that for 1948, was approved on Nov. 9 after the API Board of Directors heard the report of John M. Lovejoy, chairman of the board's Public Relations Committee.

The report was one of the main topics on the agenda of the board as the institute met for its 28th annual meeting at the Stevens Hotel here, with the largest registration in the API's history indicated.

Mr. Lovejoy's report, submitted to him by the Oil Industry Information Committee, discussed various criticisms of the program, and asserted that the present degree of industry participation is far from ideal.

Urge All-Out Participation

Majority of OIIC members recommended continuation of policy of seeking participation "by all who make their living from oil," asserting that "the evidence of Oil Progress Day is the best testimonial so far as to the value of this policy."

Report commented that "lack of participation is frequently as pronounced among employes of large companies as among smaller units." It said that "in certain areas, however, it is very satisfactory."

Other recommendations:

1. Field organization — Majority favors continuing at present size, with minor increases in personnel and budget.

2. Advertising — Committee unanimous in recommending continuation of paid advertising as a part of industry public relations program. Numerous degrees of differences of opinion exist, however, on purpose, method and amount of money which should be devoted to this phase of program. Recommendation for 1949 is, therefore, a compromise. One minority group wanted less, another more, than that being recommended. Majority agreed on advertising program in national magazines and special opinion groups with $750,000 budget.

3. Special events — Committee agrees on having at least one special event a year since Oil Progress Day succeeded beyond expectations.

4. Background briefs — Committee recommends API Department of Information be developed as necessary to supply factual material needed from time to time.

Regarding shortcomings and omissions of the past, committee said plans to make some corrections "are obvious in the recommendations for the program in 1949" and that plans for correcting others have been agreed upon in internal work of committee.

So far as over-all program for 1949 is cencerned, committee recommended continuance of public relations program as now constituted, with certain improvements.

"Experience so far indicates that the plan as originally adopted is sound and will aid the industry in accomplishing its long-range objectives," report said. "We feel sure that more can be and will be accomplished in 1949 under the plan and budget proposed than was achieved in 1948. Experience for which we have paid in the past will bear fruit in 1949. We have the advantage of the momentum with which the program now rolls."

Committee said it anticipates increase in number of participating companies, expects to work out plans for dealer relations, to work more effectively with trade associations, to reach special women's organization groups, to improve and make speakers' committees more effective, to provide for better channels between district committees, to start work with educator and student groups, to work more effectively with the oil trade press, to improve record with newspapers, radio stations, news syndicates, news wire services, radio networks and magazines, and to reach more oil company employes.

In addition, committee said it expected to reappraise field efforts, use surveys and tests to assure advertising effectiveness, and develop an industry motion picture besides planning special event of national importance.

1949 Budget About Same as 1948

Proposed 1949 budget totaled $1,-

Master Plan for Organizing Handling of Military Oil Supplies Approved by API Defense Group

NPN News Bureau

CHICAGO—API Defense Services Committee Tuesday approved a master plan for organizing the handling of military petroleum supplies by the three armed services in event of war.

Work of a subcommittee headed by Rex Smith (Skelly Oil), plan now is to be submitted to Washington for consideration there by the military. It details specific assignments for all petroleum officers who would be needed by services, ranks these officers, states civilian experience required.

Military's intention, if plan is approved by Washington, is to pick and assign officer personnel in advance of an actual emergency.

Defense Services Committee, of which C. E. Cummings (Shell) is chairman, also got report Tuesday that the affiliation program now is practically complete in all areas except the South and West Coast, where military wants some chemical corps fog generating units organized. However, representatives of the Air Force served notice that they are organizing more realistically for petroleum handling and may issue call for reserve personnel to man special units operating in isolated areas.

Quartermaster Corps again asked industry to co-operate in preparation of training aids, manuals, correspondence courses, etc., and said it needed a top petroleum man in Washington to co-ordinate this work.

Cards containing full page ads carried in local newspaper on Oil Progress Day were on display at the API convention. This picture shows ads sponsored by oil companies, including Independent jobbers in (left to right): Minot, N. D.; Laurel, Miss.; Mankato, Minn.

850,000, approximately same as that approved for 1948. Estimated 1948 disbursements total $1,610,053.

In discussing various activities planned under each of budget items, report included these comments:

National organization—No increase recommended.

Field organization—Committee intends to study and investigate closely such operations. No changes are recommended meanwhile.

Editorial staff—"The chief self-criticism of the Oil Industry Information Committee of the material distributed in the program so far has been editorial quality. The amount of material produced has undoubtedly been excessive for the available manpower, but the committee believes shortcomings exist in this phase of the work in: (1) knowledge of the industry, (2) public relations technique, and (3) writing quality. We plan during the coming year to shift more of the editorial load for the public relations program to the API Department of Information."

Printing—Plans for 1949 call for fewer pieces, but more carefully prepared and printed.

Advertising—Proposed 1949 schedule includes five groups of publications: (1) general national magazines, such as *Life, Saturday Evening Post, Look* and *American*; (2) general magazines in rural areas, such as *Farm Journal, Country Gentleman* and *Progressive Farmer*; (3) magazines reaching opinion leaders, such as *Time, Newsweek, U. S. News, World Report* and *Pathfinder;* (4) magazines reaching editors such as *Editor and Publisher, American Press* and *Publisher's Auxiliary;* and (5) oil trade press, reaching people in all brances of oil industry. Advertising will be planned, as in 1948, to further long-range objectives while retaining news report industry activities.

Survey—Spot survey checks will be needed to assure efficient expenditure of money, to measure results, and assure efficiency of operation. In addition, a 1949 checkup survey on national trend and opinion on questions surveyed in 1946 is recommended.

Special projects—Special event for 1949 will be developed and presented to public relations committee at a future date.

Somewhat at odds with the OIIC report was a set of resolutions adopted by OIIC district chairmen, prepared after a long session here on Nov. 7. The district chairmen said they had reached unanimous agreement that the oil industry public relations job "could only be done at the grass roots level and not by national advertising or national publicity."

Report, submitted by Willard W. Wright, New England regional manager for Sun Oil, newly elected head of district chairmen's organization, said: "It was stressed by all parts of the country that we need even more concentrated committee activity with the development and greater use of tools designed to decentralize personal sales contact with the oil men in the communities where they operate."

District chairmen also:

1. Urged increased field staff. Addition of a least one more man in each district was suggested.

2. Criticized type of advertising used in past. Chief criticism was that in marketing areas, ads failed to feature important part the distributor, fuel oil jobber and service station operator play in community activities and in giving service to communities.

3. Voted to meet at least three times a year at place and time concurrent with OIIC to afford an opportunity for exchange of ideas. This was approved by OIIC.

4. Asserted the "we solicit and need greater enthusiasm from top management in support of this program. We still need improved activity in clearing and strengthing the lines of communication in all of the integrated companies so that the techniques of the information program, after being supported enthusiastically by management, reach all employes and the dealer level without loss of time and efficiency."

5. Urged greater degree of participation in the program be sought and obtained from "so-called Independents, the small fellows, the dealers and the fuel oil jobbers."

6. Urged funds be set up for local projects.

7. Agreed in view of accomplishments of Oil Progress Day that event should be expanded into a week's activity in 1949.

Oil Divorcement Bill Planned by Gillette

CHEROKEE, Ia.—An oil industry divorcement bill, probably identical with the one he introduced in his former senate term, already is being planned by Sen.-Elect Gillette (D., Iowa).

"The bill will be designed to separate the producing, refining and marketing branches of the industry," said Sen. Gillette shortly after the Nov. 2 election. He wasn't sure whether the measure would call for separation of the wholesale and retail segments of the marketing branch.

He intends to confer with representatives of various segments of the industry before making any final decisions, he explained.

Jobber Council Delivers Ultimatum on Margin Issue

Group Says It Will Back Government Control of Prices Unless Margins Go up Before Christmas

By LEONARD CASTLE
NPN Staff Writer

CHICAGO—The National Oil Jobbers Council voted at the opening session of its quarterly meeting Nov. 8 to throw its support behind government control of oil prices at the next session of Congress unless margins are increased to a "satisfactory" level 10 days before Congress convenes on Jan. 3.

The council also:

1. Adopted a report of its Economics Committee calling for an immediate increase of 25% in existing margins.

2. Voted to appoint a special committee to study the problem of divorcement and recommend what stand the council should take on this issue.

3. Approved a report of its Pipe Line Committee declaring that divorcement "seems the only idea which, if developed, might bring about an operation of pipe lines as common carriers in fact."

The price control resolution was presented by Gordon Duke of Southeastern Oil Co. and vice chairman of the council after prolonged debate as to whether the council should offer its services to Sen.-Elect Gillette (D., Ia.), who has announced that he will introduce a divorcement bill in the next session of Congress (see story on p. 12).

Mr. Duke's motion, adopted unanimously, said:

"That the National Oil Jobbers Council appoint a committee to go to Washington on Jan. 3 to support government control of oil prices, with said control providing for a satisfactory margin for jobbers, unless not later than 10 days prior to Jan. 3 a satisfactory margin is forthcoming from industry. In addition, the NOJC appoint a committee to recommend to the full council what position it should take on the matter of divorcement, said committee to begin its studies at once."

The Economics Committee report, a 21-page document citing facts and figures as to why the jobber should have higher margins in view of zooming operating costs, concluded that:

"The National Oil Jobbers Council recommends that the guaranteed, written-in margin provision on gasoline be increased at least 25%, and that a further guarantee provision be added to the contract to include kerosine, tractor fuel and fuel oils with increases of at least 25%."

Committee Findings Discussed

In discussing its findings, the committee said:

"In the early spring of 1947 it became apparent that petroleum prices were on the upswing. Increases in the price of crude oil were more or less common occurrences. Corresponding increases in the tank car market followed regularly. But corresponding increases in the tank wagon market (which in part determines jobber margins) very seldom materialized.

"With each succeeding crude and tank car increase came a decrease in jobber margins by the simple expedient of failure on the part of supplying companies to proportionately increase tank wagon prices. The profits on integrated operation went up. The profits in marketing went down.

"It has been historically true that with each 10c per bbl. increase in the price of crude oil, a corresponding increase of 0.25c per gal. be made on tank wagon prices. During the 1946-48 upward spiral this yardstick was not used. Consequently jobber margins decreased while integrated company earnings increased. In two years time company earnings have risen more than 100% in some instances. Jobber earnings meanwhile, have not increased in proportion, if at all.

"Material contained herein will show the extent of these facts. It is common knowledge that the integrated oil companies determine the prices at which their jobbers must buy. The price at which the jobber must sell is determined for him by a complex system over which he has no control. Some integrated companies enjoy an approximate advantage of 2c or more per gal. through use of the pipe lines and water terminals. These circumstances are some of the reasons why the Independent petroleum jobber is unable to compete with the integrated companies by operating only in the marketing branch of the industry, enjoying no profits from production, refining and transportation.

"Now, in late fall of 1948, with little or no positive action on the part of the suppliers towards the financial betterment of the Independent jobbers, the National Oil Jobbers Council has prepared this brochure of facts, figures and stories to prove conclusively that the small oil man must at last make use of governmental protection if he is to survive."

The report, it was announced, will be distributed to members of Congress, President Truman and his cabinet, to the public and throughout the oil industry.

Compiles Comparative Price Table

As a part of its report, the committee published a table of comparative price increases on gasoline designed to show that the producers have increased their return on crude oil approximately 4.16c per gal. since April 1, 1946 while jobber margins have decreased:

Dates	Crude Oil Increases (Per bbl.)	Tank Car Price (Per gal.)	Tank Wagon Price (Per gal.)
April 1, 1946 ..	.10	5.42	12.0
July 25, 1946 ..	.25	6.875	12.5
Nov. 15, 1946 ..	.10	7.16	13.2
March 10, 1947	.25	7.875	14.7
Oct. 15, 1947 ..	.20	8.97	16.2
Dec. 6, 1947 ..	.50	10.281	16.4
Sub Total ..	1.40	4.861	4.4
Sept. 28, 1948 ..	.35	10.685	16.4
Total	1.75	5.265	4.4

The report pointed out that the crude price increase of Sept. 28 was started by one major company but others have not followed the advancement. The report also stated that the situation as applied to fuel oils "is even worse" than for gasoline as shown in the table.

"Fuel oil margins are actually less today than they were in 1946, despite the inflationary prices existing on those products," it said.

Another page of the report was devoted to a study of petroleum industry freight and pipe line rates to show that because pipe line charges are considerably below freight rates, supplying companies are making big profits from transportation alone.

Several pages of the report are devoted to tables and charts showing that net profits of major companies during 1948 have increased tremendously over 1947, in some cases 100% or more.

Cites Higher Jobber Expenses

To prove that the jobber's expenses have mounted rapidly while his margin remained the same, the Economics Committee published this ta-

ble to comparative jobber costs, listing a few items selected at random:

	1941	1948
Meters	$166.60	$209.00
Barrel pumps	7.50	13.35
Lubesters	19.05	37.75
S.S. pumps	225.00	326.85
Nozzles	6.90	9.40
Basement tanks	19.50	41.50
Storage tanks	List minus 35%	List plus 30%
Ford truck	737.00	1,425.00
Chevrolet truck	719.00	1,562.00
International truck	859.00	1,532.00
Truck driver	$33.48 per wk.	$59.40 per wk.
Clerical help	$145.00 per mo.	$275.00 per mo.

The rising cost of doing business, the report said, applies not only to the Independent jobbers but to the entire marketing branch of the industry. "These items of operating expense have risen in a much larger degree than net income. Even greatly increased volume does not offset the increases of these and other expense items of doing business."

One chart in the report showed that in 1945 the gross profits of jobbers were divided 70.5% to expenses and 29.5% to net profits. But in 1946, expenses climbed to 75.9% while net profits went down to 24.1. In 1947, according to the chart, expenses last year ate up 81.2% of the gross profits with net profits falling to 18.8%.

Another chart illustrated that in 1946, expenses were 43.9% higher than in 1945 while net profits climbed only 15.8%. In 1947, the chart showed, expenses were 78.4% higher than in 1945 while net profits increased comparatively but 38.1%.

Included in the report are several recent editorials and articles from NATIONAL PETROLEUM NEWS which urged that major companies give serious consideration to the margin problem. The report was drafted by a committee composed of J. E. Adrian, H. F. Horning and Kenneth C. King, secretaries, respectively, of the South Dakota Independent Oil Men's Assn., the Northwest Petroleum Assn. and the Wisconsin Petroleum Assn.

The report of the council's Pipe Line Committee, headed by William Heinz, secretary of the South Carolina Oil Jobbers Assn., declared that Independent marketers have made "vain efforts" to have pipe lines operated as common carriers in fact as well as in theory but "our preliminary study indicates that this cannot be accomplished short of a revolutionary governmental directive, as the very foundation of the integrated price structures of the pipe line owners is at stake."

"Divorcement is a highly controversial subject in this council, but due to the methods of operation and the present ownership of the pipe lines, and the weakness of existing laws and regulations, it seems the only idea, which if developed, might bring about an operation of pipe lines as common carriers in fact," the report said.

Oil's Supply Position Much Improved Over Year Ago, Boatwright Tells API

Kerosine and Distillates Present Only Potential Supply Problem, Marketing Division Session Hears

NPN News Bureau

CHICAGO—An optimistic prediction on the industry's ability to supply its customers this coming winter, made by John W. Boatwright, general manager of the distribution economics department, Standard Oil Co. (Indiana), was the high spot of two sessions of the API Marketing Committee here this week.

The sessions attracted unusually large attendance, with nearly every seat filled in the Stevens Hotel Ballroom.

Discussing "The Current Supply Position," Mr. Boatwright said that kerosine and distillates are the only products now presenting a potential supply problem. Gasoline is in ample supply and the supply of residual fuels is outstripping requirements, he reported.

Assuming an average winter, the demand for kerosine and distillates during the six month period ending March 31, 1949 will be approximately 12% higher than a year ago, he said.

"The real assurance of industry ability to meet this demand is maintenance of the present high levels of refinery operation, plus the present sound inventory levels of these products contrasted with year earlier figures. Without presenting an analysis of refinery yields of the various products, present levels of refinery operation at approximately 5,600,000 b/d, plus seasonal stock withdrawals, would provide the industry with a 'statistical' balance on even these middle-of-the-barrel portions.

"We must ever be aware, however," Mr. Boatwright said, "that there is a difference between a 'statistical balance' and an operating balance free of distribution dislocations. If the industry has only a statistical balance, it must achieve a near perfect distribution of stocks at all times in keeping with market demand. Additional supplies permit a safety factor from which adjustments can be made rapidly to meet abnormal conditions in local areas, thus insuring against possible consumer hardships."

Average improvement in stocks of kerosine and distillates is about 27% but regional differences reflect varying degrees of readiness to meet winter requirements, Mr. Boatwright said. In District 1 (East Coast) stocks are up 30% over a year ago; in District 2 (Midwest) they are increased 45% to the highest levels yet attained in the area; in District 3 (Mid-Continent), stocks are up 27% and in District 4 (Rocky Mountains), 74%.

Because of the prolonged refinery strike in District 5 (West Coast), stocks of kerosine and distillates are about 3% below last year's levels while the industry there faces increased demand from additional space heaters and central type burners, Mr. Boatwright observed.

Ses Demand Being Met

"Over-all, the demand for kerosine and distillates should be met with considerably less strain on productive and distributive facilities than was the case last winter," he said. "The situation, however, is not one of unqualified optimism as to the industry's ability to meet all demands. It is rather one where the industry can look forward with reasonable assurance that it will be able to meet this winter's requirements."

Discussing the effect of the West Coast strike, Mr. Boatwright said that the industry in District 5 "will undoubtedly have to evidence an unusually high degree of watchfulness in production, refining and distribu tion of overhead products throughout that portion of the market to stay abreast of requirements."

Nationally, the gasoline demand for the 1948-49 winter is expected to increase between 7% and 8% while stocks are about 12% above last year, Mr. Boatwright reported. With respect to residual fuels, he said, the rapid accumulation of inventories indicates that supply is outstripping requirements.

Gordon Duke, Southeastern Oil Co., carrying a message from the National Oil Jobbers Council, explained at the Tuesday session the action taken earlier by the jobber council on the need for more margin and on plans to study divorcement (see other story on p. 13).

When Mr. Duke finished with his address, B. L. Majewski, chairman of the Marketing Committee, observed that he was glad to learn the jobbers were going to study divorcement thoroughly before taking a stand on

Among early registrants at the API meeting was A. C. Keyes, Casper, Wyo., who who is being helped by Mary Patricia Brooks, of API's registration staff, and J. A. McNally, from API's New York staff. At the right, waiting to register, are P. E. Flowers, Standard Oil Co. of California, and Jim Hill, Union Oil of California

the subject because "divorcement will only put a noose around all branches of the industry and bring us to nationalization, under which no one can function."

Mr. Majewski said that the committee itself would distribute copies of the jobber council Economics Committee report to its members and all other persons who desire to study it.

In a statement opening Tuesday's session, Mr. Majewski observed that "some of us did not like the verdict of the election, but we must accept the verdict and should with alacrity." He said that he was concerned that someone within the industry would write an editorial saying that the oil industry was in peril because of the outcome of an election.

People who write and say these things, Mr. Majewski said, do not represent or speak for the oil industry. The business of the industry, he contended, is to accept the verdict of the people.

At his own request, Mr. Majewski, who retired Tuesday as chairman of the Marketing Committee, was elected to the chairmanship of the Committee for Development of a Service Program for Marketers and was authorized to appoint members of the committee. He explained that the committee has not functioned during the past year because he was unable to find anyone who would volunteer for membership.

Earl Shelton, manager of retail sales for Shell Oil Co. in Ohio, reported on the preliminary results of a marketing test of the newly developed Vitameter in Columbus, O. (see NPN Sept. 15, p. 49).

John Albright of Bureau of Census explained that a new business census, covering 1948 operations, will be taken next year beginning in January. Census Bureau enumerators will visit each business in the nation. A special questionnaire has been drafted for the oil industry, he said.

When the Nominating Committee presentd its 60 selections for membership in the Marketing Committee, Rankin Peck, president of National Congress of Petroleum Retailers, protested that his association should have six members although he and the secretary, Harry Franklin, were among the 60 nominated. He nominated four other persons from the retailers congress but they were rejected.

R. F. Baity of Standard Oil (Indiana) praised Mr. Majewski for his work during his term as API marketing vice president.

Tribute was paid to two marketers, L. L. Coryell, Jr., of Lincoln, Nebr., and John Downing of Standard Oil (Kentucky) who died during the past year.

At the Monday session, Theodore O. Yntema, research director for the Committee of Economic Development, warned that the alternative to free competitive markets is state control and state control will snowball until it is virtually complete.

Dr. Yntema told the audience, which occupied practically every seat in the Stevens Hotel Grand Ballroom, that the economy needs individual businessmen, because they can do some things better than larger businesses and they often find new ways to do things. Moreover, the more people who have a real stake in capitalism, the more likely it is to be preserved.

In a number of respects, he says, big business faces the choice of exercising self-restraint, submitting to government restraint, or being broken up so as to dissipate the accumulation of power.

New Tetraethyl Lead Plant Being Constructed by Ethyl

NPN News Bureau

NEW YORK — Ethyl Corp. will build a seventh plant for the manufacture of tetraethyl lead at Baton Rouge, duplicating in size and capacity a sixth plant now under construction and scheduled for completion in the fall of 1949. Completion of seventh plant is expected late in 1950.

Addition of the two new units will increase production at the Baton Rouge manufacturing plant, already the largest in the world, by 40% compared with present capacity.

Oil industry forecasts of continuing increases in gasoline production over the next five years, plus anticipated improvement in gasoline quality during this period, call for further increases in the supply of antiknock compounds, company said, adding "Ethyl Corp. will be prepared to serve these needs of the industry."

Expansion program now under way, in addition to the two new tetraethyl lead plants, includes plans to increase manufacturing facilities for the supply of such intermediate chemicals as metallic sodium and Ethyl chloride, which are used in making TEL, as well as adequate supplies of ethylene dibromide and ethylene dichloride which are used in the finished antiknock compound. No further revision of plans for increasing production of these intermediate and component chemicals will be necessary, President E. L. Shea pointed out, because ample supplies will be available for the full production of the two new TEL units from the day each begins operations.

Oil Company Makes Safe Aircraft Hydraulic Fluid

Special to NPN

SAN FRANCISCO — California Standard will begin marketing at once of a new non-flammable aircraft hydraulic fluid developed by California Research Corp., California Standard research organization. New product will not ignite when subjected to 5,000 degree flame, company stated.

Hydrauclic fluid, which will eliminate fire hazard present in planes having pressure hydraulic systems, is made from a highly flammable petroleum gas. Company reports that the liquid, to be known as RPM non-flammable hydraulic fluid, is so fire resistant that it is a possibility for fire extinguisher system use on planes.

Proposed Industry Draft on National Oil Policy Completed by NPC Group

By HERBERT A. YOCOM
Chief NPN Washington Bureau

CHICAGO — The drafting of a proposed statement of industry's views on the question of a national oil policy was completed here Nov. 8.

If approved by the National Petroleum Council and recommended by Interior Secretary Krug to the President, a member of the drafting group said statement "should go a long way towards helping develop, create and maintain a healthy industry."

It is to be submitted to NPC in January for final action, after which it will be filed with Mr. Krug, at whose request the council agreed to express in black and white the industry's ideas as to a national oil policy.

As finally approved Nov. 8 by an NPC committee headed by A. Jacobsen (Amerada), the proposed statement would place the industry firmly on record as:

1. Opposed to government taking any sort of a hand in the construction of synthetic liquid fuel plants. Report proclaims that free play of ordinary forces alone are enough to assure the orderly and economic development of synthetic fuels by private industry.

2. Favoring imports only to the extent needed to supplement domestic supply because imports in excess of the country's economic needs will retard domestic exploration, development and technological advance. While agreeing that it is perfectly proper for government to further the operations abroad of American companies, statement emphasizes that they should not be accorded preferential treatment at expense of domestic industry.

3. In complete opposition to the idea of locking up proved reserves by suppressing production (as discussed in a recent preliminary oil staff report of the National Security Resources Board which suggested cutting back U. S. fields to 80% of their maximum efficient rate) or by government acquisition of proved fields. Such action, report declares, would retard the normal development of the industry. Similarly, it opposes withholding public lands from development, stressing that oil in such areas can be made available for use in wartime only through continuous development in peacetime. And of suggestions that the U. S. import foreign crude for storage in depleted fields, it says this is unnecessary and impractical.

4. Believing that the best assurance of adequate reserves and facilities for an emergency is a vigorous oil industry. Policy draft makes the point, in this connection, that high peacetime requirements for oil have effect of creating a high reserve productive capacity for war.

5. Supporting a limited program of products stockpiling by the military to meet initial requirements of a war. Advance accumulations on grand scale are unnecessary, it is said, because immediate and severe rationing will make adequate supplies available by time military is ready to mount full offensive.

6. Endorsing permanent procedures for government — industry consultation to assure proper planning to meet an emergency, with the PAW-PIWC type set-up of World War II favored in event of another conflict.

7. Against monopoly and giving full recognition to the interdependence of all units in the industry, big and little.

8. Urging development of the tidelands by private industry operating under states laws and regulations.

9. Opposed to encroachment by the Federal Power Commission into the fields of natural gas production, gathering and processing, as well as to attempts by the FPC to control end use of natural gas. Report warns that if FPC succeeds in these directions, other energy sources likewise will have to be controlled and lead to a regimented industry and managed economy.

Oil Demand Falls Below U.S. Bureau of Mines' Estimates, with Residual Consumption Off 5%

By NPN Staff Writers

Bureau of Mines last week said total demand for all oils in the third quarter was about 2% less than it had forecast, with a 5% reduction in residual demand below a year ago, probably accounting for about one-half of this.

Its prognosticators believe also that their estimate of probable fourth quarter total demand may turn out to be about 1% high.

Bureau's estimate of market demand for domestic crude during November is expected to be about 60,000 b/d under the 5,620,000 b/d forecast for October, with Texas alone down 40,000 b/d.

Crude runs during October now are figured to have been about 120,000 b/d off the 5,580,000 b/d estimate, or around 100,000 b/d under rate experts believe might reasonably have been achieved had it not been for the California strike.

Other developments the past week pertaining to the over-all supply situation included:

Gains in all categories except residual fuel production and kerosine inventories were recorded for the week ended Oct. 30, according to API. Crude production rose 8,150 b/d compared with the preceding week, setting a fourth consecutive record high at 5,604,100 b/d.

Refinery runs increased 70,000 b/d, with operations of reporting refineries up from 91.4% to 92.6% of rated capacity. Throughput of refineries in California, where strike in effect since Sept. 4 is being terminated gradually, was 875,000 b/d for the week, a gain of 12,000 b/d above the previous week.

On inventories, the score showed: gasoline up 851,000 bbls.; kerosine down 764,000 bbls.; gas oil and distillates up 1,302,000 bbls.; residual up 548,000 bbls.

Senate Commerce Oil (Reed) Subcommittee, meanwhile, issued statement last week saying that "in view of the marked improvement in supply of heating oil and gasoline" it will not resume hearings this fall as planned originally. However, Acting Chairman McMahon (D., Conn.) said subcommittee would remain in "standby position" to call hearings on short notice if supply situation becomes critical.

Russell B. Brown, Independent Petroleum Assn. of America general counsel, told Oil Heat Institute of New England last week the "twin concepts of withholding our petroleum from use and of making imported oil the dominating influence in our markets" will weaken the competitive spirit in the oil industry.

Bureau of Federal Supply says it has offers of 1,736,000 gals., or 58% of 3,036,000 gals. of fuel oil and kerosine sought for its Southeast Region (No. 2), for the February-July period on a re-advertisement aimed at rounding out its coverage.

Ashland Oil & Refining Co. has started preliminary work on its $500,000 river terminal on the Ohio River across from Louisville, in Clarksville, Ind. New terminal is scheduled for completion early next year and will have a storage capacity of 7 million gals. of finished petroleum products.

Inquiry Into Effects of Pricing Decisions Gets Boost from Chairman-to-Be of Probers

NPN News Bureau

WASHINGTON — Senate Trade Policies (Capehart) Committee is launched on its inquiry into probable effects of court and Federal Trade Commission pricing practice curbs on nation's economy, encouraged by the Democrat, who is to be its next chairman, to carry on "full speed" with its "far-sighted" exploration.

Sen. Johnson (D., Colo.) dispelled, as hearings opened today, doubts about fate of investigation which has arisen out of upset of Republican applecart on Nov. 2.

In letter read by Chairman Capehart (R., Ind.), Sen. Johnson, ranking Democratic member of committee, said he will take over its chairmanship (when Congress reconvenes), then commended group's undertaking, saying he was absent only because of accumulation of work in his home state.

Initial witnesses gave committee further encouragement. They included John M. Hancock, New York, former general manager of U. S. delegation to United Nations Atomic Energy Commission and associate of Bernard Baruch; DeWitt Emery, Chicago, president of National Small Businessmen's Assn., and several businessmen.

"Every thread in the industrial fabric may be strained or stretched or torn apart on some of the theories now said to be part of the law of the land," Mr. Hancock told the committee.

Terms Decisions 'Foggy'

As he saw the situation brought about by court and FTC decisions, "Congress has the responsibility of deciding whether the country is going down the road to economic statism or staying on the path of free enterprise."

Rapping decisions as "foggy economic theories," he suggested they will, if allowed to stand unchanged, result in local monopolies, possible destruction of savings invested in plant facilities, dispersion of factories "no matter how hard may be the cleavage from their present communities," and possible uprooting of workers.

Mr. Emery, who said he spoke for small manufacturers as well as wholesalers, retailers, and service companies, declared:

"If the basing point method of pricing has been abused by one industry or another, has been used as a means of setting up conspiracies in restraint of trade, those things should be corrected, but it isn't necessary to kill or otherwise destroy the whole pricing system in order to correct these abuses. Doing so, in my judgment, is in exactly the same category as burning the house down in order to kill a few cockroaches in the basement."

He urged committee to do "everything it can" to have Congress "overrule" Supreme Court by immediately passing legislation to legalize basing point "or some such method" of pricing, and enact legislation clearly outlining authority of FTC.

Sen. Capehart said committee "will not waste time on the propriety of conspired prices," which are "clearly wrong." On other hand, he asserted:

"I cannot overemphasize that the only issue with which this committee is now concerned. . .is whether sellers, acting independently and separately and in the absence of conspiracy, should be permitted to sell their products on national uniform delivered prices, uniform zone prices, or by absorbing freight to meet the lower prices of a competitor whose plant is located closer to the customer."

Exclusive Dealing and Industrial Bigness Receive Setback in Court, FTC Rulings

WASHINGTON — Consent decrees obtained by the Justice Department in flat glass and motion picture antitrust actions, and Federal Trade Commission cease-and-desist order against a pressure cooker manufacturer have dealt industrial bigness and exclusive dealing some sharp blows.

DJ, charging eight glass companies and a trade association with conspiracy to monopolize production of window, plate and safety glass, had sought, among other things, to reduce several companies to owning only one plant each.

By going into federal district court in Toledo, Ohio, with a consent decree, the companies escaped what they called "atomization," but five of them, Libbey-Owens-Ford, Pittsburgh Plate Glass, the American Window Glass Co., Fourco Glass Co. and Rolland Glass Co., are enjoined from buying more factories of certain types, and must observe numerous other injunctions.

L-O-F and Pittsburgh Plate may not buy any more sales and warehouse outlets for the next three and 10 years, respectively, and must increase the number of their distributors by 10% in the next five years.

All eight companies are under severe exclusive dealing restrictions, and the trade association must disband. Also, DJ can "reopen" the case so that the glass majors may yet lose their plants.

By the motion picture case decree, Radio-Keith-Orpheum Corp., of which Howard Hughes is controlling stockholder, was proposing to divorce its exhibition business from its production and distribution businesses within one year.

RKO is one of the defendants in a suit by which DJ is seeking divorcement of five major film distributors. The Supreme Court last May reversed a previous refusal by a New York District court to grant divorcement, and sent the case back to the lower court for reconsideration (see May 5 NPN, p. 17).

The National Pressure Cooker Co., Eau Claire, Wis., and five of its officers were ordered by FTC to "stop" using exclusive dealing contracts in the sale of pressure cookers and canners, and to "stop" using coercive methods to compel wholesale distributors to enter into such agreements.

Chances for More Oil Steel Pacts Seen Better

NPN News Bureau

WASHINGTON—Prospects for establishing a few more steel allocations programs for oil are regarded in informed quarters here as possibly brightened by President Truman's surprising victory at the polls last week.

These quarters expect steel industry now to be more receptive to proposals for additional allocations agreements, out of fear that doubt as to its co-operativeness will lead administration to renew its call for mandatory controls.

Accordingly, spotlight will be on Commerce Department's Steel Products Advisory Committee when it meets some time in next two weeks —the date hasn't been set.

Whether the often-rejected line pipe and oil country tubular goods proposals will be laid again before the committee is yet uncertain, although Interior's OGD has pledged a continuing fight for them.

However, his Office of Industry Co-operation plans to present again its plan for earmarking about 16,000 tons of steel monthly for terminal and bulk plant storage, and a total of 25,000 tons for East Tennessee Natural Gas Co.'s proposed pipe line to atomic energy plant at Oak Ridge, Tenn.

OIC says it has obtained "further support" for both programs since last month's disappointing meeting of advisory committee. In the case of terminal and bulk plant program, support comes from an "enthusiastic" 30 or 40 fabricators who met with OIC recently.

Union Oil, Richfield Disputes Still Unsettled in West Coast Oil Strike

By NPN Staff Writers

Inability to settle differences between OWIU, and the Union Oil and Richfield Oil appears to present the major obstacles now preventing final termination of the West Coast oil workers' strike.

Question of seniority is holding up settlement at Richfield, union members at Richfield rejecting 3.5-1 settlement proposals over the week end. OWIU President O. A. Knight told NPN the strike will continue. Observers, meanwhile, expected state conciliation officials to make attempts at arranging new Richfield talks in seeking a new basis for settlement.

Richfield workers rejected seniority provision similar to that agreed upon in OWIU settlement with Shell Oil, whereby nonstrikers would retain their positions regardless of seniority to disadvantage of strikers with seniority.

When asked by NPN if Richfield employes were insisting on a clause similar to one inserted in agreement reached with California Standard at El Segundo, Mr. Knight replied, "They want something better than that one."

Some groups of OWIU employes in four companies—Richfield, Union Oil, Lloyd Corp. and Ohio Oil—petitioned NLRB for decertification of OWIU as their bargaining agency. If NLRB should accede to this request, it would be necessary to hold elections at the four companies to determine what bargaining agency the employes wish to represent them. Meanwhile, OWIU could demand a hearing on the petition.

Charges OWIU Discrimination

A new attempt to solve the difficult OWIU-Union Oil dispute Nov. 8 failed, with Union Oil charging inferentially that union was discriminating against it. President Reese Taylor said union reached agreement with some of the companies on the basis of terms similar to those offered by Union Oil. Then he remarked, "For some reason they haven't reached an agreement with us on those terms."

Union Oil spokesman told NPN he expected further talks would be had, but did not know when. The spokesman said union was offered three different plans regarding seniority, all of which were rejected. He said one was like Shell's, another like Tide Water Associated's and the third, Richfield's own plan preserving seniority rights but requiring returning strikers to await status restoration until an opening was available.

Meanwhile, no dates have been set for talks to end the strike against Tide Water Associated's Avon refinery or two groups of The Texas Co. which are still in effect.

Two points appeared stumbling blocks to settlement at Union Oil:

1—Company hired an estimated 400 men from outside to fill vacancies caused by strike. Company said it would not dismiss striketime workers to make way for returning strikers and has termed more than 100 ment "undesirables."

2—Union Oil has reiterated that it intends to subcontract considerable work in its plants.

Last week saw scores of workers reporting at Shell, California Standard's El Segundo, The Texas Co. and Tide Water Associated plants following the signing of contracts with these majors.

Other Developments

Elsewhere on the labor front, there were these developments the week past:

NLRB ordered an election at Empire Petroleum Co., Denver, Colo., to determine right of OWIU to represent stillmen, firemen, helpers, brake shift men and maintenance men. Board dismissed petition by International Assn. of Machinists (independent) Lodge 1366 to bargain for units of machinists and garage mechanics.

International Union of Operating Engineers (AFL) at Premium Petroleum Co., Baird, Tex., was authorized by NLRB to negotiate on behalf of operating and maintenance employes.

OWIU was told that Locals 23 and 254 now could bargain for carpenters at Gulf Oil Corp., Port Arthur, Tex., as part of the operating and maintenance units currently represented.

Elections were ordered at Lewis Oil Co., Kansas City, Kans., and Kansas City, Mo., to select bargaining representatives for all service station employes.

Federal Security Agency has started a study of workers welfare plans in the petroleum refining industry. Purpose of the project is to learn the extent and characteristics of the plans and their impact on the federal social security program.

General strike by East Coast members of International Longshoremen's Assn. (AFL), scheduled to begin at midnight Nov. 9, seemed to have been averted when agreement was reached late Nov. 8. Pact is subject to union ratification.

Lakin to Head Shell Oil's Activities on West Coast

NEW YORK—P. E. Lakin, Shell Oil Co. vice pesident in charge of marketing, will take charge of company's activities on the West Coast next year, succeeding Sidney Belither, present executive vice president and chairman of the Shell Oil board, who will retire effective Dec. 31 of this year.

Mr. Lakin, who began with Shell Oil on the West Coast in 1915, will return there where he will work to more closely integrate company operations east and west of the Rockies.

Mr. Belither has been in charge of Shell West Coast activities since 1934.

J. G. Jordan, West Coast vice president in charge of marketing will come to New York to fill Mr. Lakin's former post.

16 Oil Company Earnings Comprise 26% of Total

NEW YORK—Net earnings of 16 oil companies during first nine months of 1948 accounted for approximately 26% of total nine-month net of 400 leading U. S. corporations, a survey published by National City Bank shows. The 16 oil companies reported $718,454,000 of a 400-corporation total of $2,780,071,000.

During same period last year same 16 oil companies reported $410,825,000, or roughly 19.4% of a total of $2,121,846,000 for 400 corporations.

11 Northern Cities Report Degree Days Below Normal

NPN News Bureau

CLEVELAND — The season to date (Sept. 1 through Nov. 7) is warmer than normal in 11 northern cities reporting degree days each week to NATIONAL PETROLEUM NEWS. Two southern cities are colder than normal, Birmingham recording considerably more degree days than normal, but Charleston recording only nine degree days above the seasonal normal.

Minneapolis appears to be the "warmest" city to date, having recorded 215 less degree days than normal for the season. For the current week (Nov. 1 through Nov. 7), all reporting cities are warmer than a year ago, as shown by degree day reports from Weather Bureaus in each city. All figures in the table below are in degree days.

***Degree Day Summary**

	This Month Nov. 1, 1948 thru Nov. 7 1948	Year Ago Nov. 1, 1947 thru Nov. 7, 1947	This Season Sept. 1, 1948 thru Nov. 7, 1948	Last Season Sept. 1, 1947 thru Nov. 7, 1947	Normal Sept. 1 thru Nov. 7
Birmingham, Ala.	27	60	185	89	69
Boston	69	117	486	418	556
Charleston, S. C.	3	6	90	18	81
Chicago	81	107	549	388	631
Cleveland	49	90	518	341	617
Detroit	72	100	608	428	641
Minneapolis	120	144	606	557	821
Nashville, Tenn.	36	78	282	153	299
New York	44	87	353	297	430
Omaha, Nebr.	106	123	484	371	543
Philadelphia	41	96	330	265	367
St. Louis	50	93	323	226	351
Washington	32	64	342	224	396
Average	56	90	397	290	446

* Degree days are the number of degrees F. by which the mean temperature for any 24-hour period falls below 65 deg. Thus, if the mean temperature for the day is 25 deg., it goes on record as 40 degree days. An average home oil burner will burn about a gallon of fuel oil for each three degree days.

Democrats Will Change Committees; Congress Oil Policy Shift Looms

NPN News Bureau

WASHINGTON — The unpredicted victory of President Truman in the national election not only gives him, in his own right, a four-year lease on the White House come next Jan. 20 but provides a working Democratic majority in Congress which will make possible the enactment into law of most, if not all, of the Truman Administration's oil policies.

New chairmen of congressional committees important to the oil industry will be installed after the first of the year and the roster of the committees will reflect the changes in the makeup of the House and the Senate.

Last week's election promises, among other things:

1. Higher taxes, almost a certainty, with possibility of some form of excess profits levy.

2. The rapid imposition of other forms of economic controls, possibly including price control and rationing.

3. Final resolution of the Tidelands controversy in favor of the federal government.

4. An intensification of the war on alleged monopoly, with oil a cinch to be given extra special attention even to the extent, perhaps, that the new Democratic Congress will push through a divorcement law.

5. At least a drastic revision, if not outright repeal, of the Taft-Hartley Act, with the ban on the closed shop certain to go.

6. Continued encroachment by the Federal Power Commission into the fields of natural gas production, rate-making and end-use control.

7. An end to any possibility for eliminating the tax-exempt privileges of co-operatives.

8. The enactment of legislation looking to building up a commercial synthetic liquid fuels industry, possibly on terms less favorable to private industry than those proposed to the Republican-controlled 80th Congress.

9. Likely extension of the reciprocal trade agreements program in the form Mr. Truman wants.

10. A bolder government approach, both in the executive departments and on Capitol Hill, to the problem of a national oil policy, with the President and his cabinet members (including Interior Secretary Krug and Defense Secretary Forrestal, if they are retained) now in a position where, if they choose, they can do some dictating instead of being told.

Oil men interested in the tidelands question now are advising against a bitter-end battle with the administration for states' title to offshore submerged lands. They see the administration maintaining its stand for federal ownership, although the Democratic convention refused to adopt a government title plank.

And they suggest that the course now indicated is to seek to compromise with the administration to protect existing company equities and assure orderly development of submerged lands generally.

Not so, Rep. Gossett (D., Tex.) or Texas' Gov. Jester, however. The former means to introduce a new quitclaim bill on behalf of the states, and predicts he'll get a lot of support in both Senate and House—and that President Truman might not decide to veto such a measure this time.

Gov. Jester feels his staying with the Truman-Barkley ticket puts him in a "better position" to continue Texas' battle for control of her tidelands than if he had bolted the party as some other Southerners did.

The astounding results of last week's election will bring the following Democrats to the chairmanship of the congressional committees, all important in lesser or greater degree to the petroleum industry:

SENATE

Interior and Insular Affairs — Sen. O'Mahoney, Wyo., who formerly was chairman of the Special Senate Petroleum Investigating Committee which recommended a national oil policy in its final report two years ago. Natural resources, including petroleum and synthetic liquid fuels, are handled by this committee. The Wyoming senator indicated this week that he does not look with favor on the Wolverton Bill, which was endorsed by the House Commerce Committee last session but failed to reach the House floor for a vote. Sen. O'Mahoney said he favors development of a commercial synthetic liquid fuels industry by "private industry" but warns that such development must be carried out with due regard to "social responsibility" to the public.

Banking and Currency—Sen. Wagner, N. Y., who may not be able to serve because of illness. In this event, leadership would go to Sen. Maybank, S. C., who reportedly is friendly to marketing-divorcement views of South Carolina Oil Jobbers Assn. This committee handles legislation affecting price controls and rationing, and both Wagner and Maybank probably would go along with any recommendation from White House for such restrictions.

Interstate and Foreign Commerce—Sen. Johnson, Colo., who voted against Rizley-Moore gas bill. In a Senate speech last spring during debate on bill to provide funds for Greece and Turkey (Truman Doctrine), Johnson charged that proposal was designed as "political insurance policy for Standard Oil companies" operating in Middle East.

Judiciary—Sen. McCarran, Nev., who has been active in support of tidelands quitclaim legislation.

Labor — Sen. Thomas, Utah, who will go down the line for repeal of Taft-Hartley law.

Public Works — Sen. Chavez, N. Mex., who reportedly may be prevented from active leadership of committee because of illness. Next ranking Democrat is Sen. Downey, Calif. This committee handles antipollution legislation, among other matters.

Small Business — Sen. Murray, Mont., who was re-elected, will take over if Democratic high command, which opposed continuation two years ago under Republican rule, grants an extension. Murray has told NPN that he personally favors keeping committee alive. If this occurs, Murray is not expected to direct committee along same lines as present chairman, Sen. Wherry (R., Nebr.), who set up "clearing house" for oil marketing complaints at retailer and jobber level. Murray probably will be inclined to delve into high-level industrial and governmental philosophies affecting small business, much in the same manner as Sen. O'Mahoney does in connection with oil.

Trade Policies Subcommittee—Sen. Johnson, Colo., also is ranking Democratic member of this group, which comes under Interstate and Foreign Commerce. Johnson, it was said, may take over chairmanship from Sen. Capehart (R., Ind.), but whether he or another Democrat assumes leadership, course charted thus far in basing-point investigation is almost certain to be changed. Sen. McMahon (D., Conn.), a subcommittee member who has not gone along with all of Capehart's plans, could have chairmanship if Johnson didn't want it.

Commerce Oil Subcommittee — Sen. Myers, Pa., is ranking Democrat, and would take over from Sen. Reed (R., Kans.) if group is continued. Myers led fight against Rizley-Moore gas bill, brought about appointment of Thomas Buchanan of his home state to membership on Federal Power Commission, and has been consistently critical of oil industry. Sen. McMahon (D., Conn.), acting chairman during absence from Washington of Sen. Reed, said last week that further hearings on the fuel oil situation have been suspended in view

of government and industry reports of an improved supply situation.

National Resources Economic Subcommittee—Sen. O'Mahoney is top ranking Democrat but may pass along chairmanship to Sen. McFarland, Ariz. This group comes under Interior and Insular Affairs Committee and O'Mahoney may decide to devote full time to leadership of parent committee. Sen. Malone (R., Nev.) has scheduled extensive oil hearings for next January, but, of course, these plans now become subject to wishes of O'Mahoney and other committee Democrats.

Armed Services — Sen. Tydings, Md., succeeding Sen. Gurney (R., S. Dak.), a former oil marketer.

Foreign Relations—Sen. Connally, Tex.

Senate Investigating Subcommittee—Sen. McClellan, Ark., is first-inline to succeed Sen. Ferguson (R., Mich.). This group was formed to take over work of now-defunct War Investigaitng Committee, which under Sen. Brewster (R., Maine) conducted lengthy investigation of Middle East oil.

HOUSE

Commerce — Rep. Crosser, Ohio, who may "de-emphasize" committee's interest in petroleum matters. Crosser, who has been in Congress since First World War, reportedly doesn't go along with Republican committee views on Mexican oil situation. This group has been most active of all lower house committees in oil probes, but Crosser will channel committee efforts more into railroad matters. Railroad unions look upon him as their "best friend in Congress" and he has authored much legislation designed to aid their membership. Also, Crosser may re-institute policy of handling specific matters, such as oil, by subcommittees. This was done in previous Democratic administrations but present chairman, Rep. Wolverton (R., N. J.), preferred to let full committee handle everything without benefit of subcommittees.

Small Business—Rep. Patman, Tex., ranking Democrat, expects the committee to be "retained" and favors continuation of the present investigation of marketing practices in petroleum and other industries. The Texas congressman wired the committee staff this week that he also will seek amendments to the Robinson-Patman Act requiring suppliers to reveal publicly the size of quantity discounts given to large purchasers. Mr. Patman developed much of testimony attacking oil industry marketing practices during recent field hearings of the committee. He probably will be in Washington Nov. 15, and may preside, when the committee will hear testimony from two former trust-busters—ex-assistant attorneys general Thurman Arnold and Wendell Berge—and others on monopolistic practices in distribution and marketing. Also, Mr. Patman advocates continuing tax exemptions for co-operatives, a view directly counter to that held by committee counsel Willis Ballinger, hired by present Republican chairman.

Armed Services—Rep. Vinson, Ga., committee's "expert" on naval petroleum reserves, is the top-ranking Democrat. If he goes along with plans to set up Natural Resources Subcommittee to handle petroleum and other matters, Vinson may name Rep. Brooks (D., La.) as chairman.

Foreign Affairs—Rep. Bloom, N. Y.

Appropriations Subcommittee for Interior Department—Rep. Kirwan, Ohio.

Banking and Currency—Rep. Brent Spence, Ky., a staunch supporter of economic controls.

Labor—Rep. Lesinski, Mich., who violently opposes Taft-Hartley law.

Judiciary—Rep. Celler, N. Y., who opposes quitclaiming tidelands to the states.

Merchant Marine—Rep. Bland, Va., former chairman, will take over again after two-year lapse. He will replace Rep. Weichel (R., Ohio), for whom tanker industry will shed no tears.

Public Lands—Rep. Somers, N. Y.

Public Works—Rep. Whittington, Miss.

Ways and Means—Rep. Doughton, N. C., is ranking Democrat on this tax-writing committee, which, among other things, considers problem of tax exemptions for co-operatives.

In individual races for seats in the Senate and House, the following results were marked up:

Nebraska—Sen. Wherry defeated oil man Terry Carpenter the Democratic nominee. During the campaign, Sen. Wherry found time to go into Iowa and speak for Sen. Wilson (R.), the incumbent, while, at the same time, Paul Hadlick, special oil counsel for Sen. Wherry's Small Business Committee, was electioneering for former Sen. Gillette (D.), the winner.

Texas—Rep. Lyndon Johnson (D.) defeated H. J. "Jack" Porter (R.), Houston oil man, in Senate race.

New Mexico—Patrick J. Hurley (R.), oil man and former Secretary of War lost the Senate contest to Clinton Anderson (D.) former Secretary of Agriculture.

Tennessee—Rep. Estes Kefauver (D.) triumphed in the Senate race over Carroll Reece (R.). In last session Rep. Kefauver was co-author of the O'Mahoney-Kefauver Bill to tighten the Clayton Act by making it illegal for a corporation to acquire the physical assets of a competitor when such acquisition would tend to reduce competition and create a monopoly. Sen. O'Mahoney said he will again sponsor this measure which failed to reach the floor of either House last year.

Oklahoma — Former Gov. Robert Kerr (D.) was the winner over Rep Ross Rizley (R.) co-author of the Rizley-Moore Gas Bill in the race for the Senate. Sen. Moore (R.) the incumbent did not seek re-election.

Michigan — Rep. Howard Coffin (R.) formerly general manager of Socony-Vacuum's Michigan-Ohio Division was defeated for re-election by George D. O'Brien (D.) in Detroit district.

Massachusetts—Rep. John W. Heselton (R.) author of a bill last session which called for complete federal control over all phases of the oil industry was re-elected. However, leading Democratic senators said this week that the Heselton Bill, which would place the petroleum industry under a commission similar to the Interstate Commerce Commission, would receive little favor in the Democratic 81st Congress. One senator pointed out that the Democratic party platform contains no planks approximating the provisions of the Heselton Bill.

Kansas—In the Senate race, former Gov. Andrew Schoeppel (R.), once chairman of the Interstate Oil Compact Commission, defeated ex-Sen. George McGill (D.). Rep. Herbert A. Meyer (R), formerly vice president of Sinclair Prairie Oil Marketing Co. and ex-managing director of the Kansas Independent Oil and Gas Assn., turned back the challenge of Marcus C. Black (D.).

Missouri—Rep. Short (R.), who headed the House Armed Services Oil Investigation Subcommittee last session, was re-elected. In a St. Louis District, Rep. Walter Ploeser (R.), Chairman of the House Small Business Committee, was ousted by Raymond Karst (D.).

Pennsylvania — Rep. Leon Gavin (R.) of Oil City, who has been active in support of legislation to further secondary recovery of petroleum, defeated Francis J. Manno (D.).

New Jersey—Rep. Wolverton (R.) was re-elected but will lose chairmanship of the Petroleum-Investigating House Commerce Committee.

New York—Rep. Jay LeFevre (R.), New Paltz fuel oil marketer, was re-elected but Rep. Hadwen C. Fuller, Parish oil man, was defeated in a close race by John C. Davies (D.).

Minnesota—William Berlin (R.), who resigned as sales representative for the Pure Oil Co. in Northeastern Minnesota to make the campaign, was unsuccessful in an attempt to unseat left-winger Rep. John Blatnik (D.). Latter vigorously advocates federal control of Tidelands.

Georgi Tells SAE of Characteristics Of Motor Oil Affecting Consumption

Discussion of Viscosity Index Improvers and Effect On Oil Use Draws Fire of Additive Manufacturers

By D. P. THORNTON, Jr.
NPN Staff Writer

TULSA — One of the hottest discussions in several years of National Fuels and Lubricants meetings of Society of Automotive Engineers occurred during this year's meeting here, over a paper entitled "Motor Oil Consumption Characteristics," presented by Carl W. Georgi, Quaker State Oil Refining Corp. On the basis of single-cylinder laboratory engine tests and a limited amount of road testing, Mr. Georgi found that oil volatility, viscosity and viscosity index were the three important characteristics affecting oil consumption, aside from high vehicle speed. He said also, that V.I. improvers could not be depended upon to increase either the viscosity or V. I. of an oil deficient in these respects sufficiently to improve consumption characteristics from this cause at a given speed.

"Although V. I. improvers may be of benefit when used carefully, and with due regard for their indicated limitations, they cannot be considered as substitutes or correctives for basic oil quality, or for natural viscosity and V.I.," he said.

Using a modified Lauson test engine to isolate the various attributes of a lubricant, Mr. Georgi found that oils having flash points above about 380 to 400°F. would not exhibit high consumption from "volatility." Likewise, he found oils having low viscosity index may have as much as 50% higher consumption characteristics than high V.I. oils.

He further found that when adding V.I. improvers to naturally deficient oils, neither large nor small additions of improver brought about a noticeable reduction in consumption, when compared with that achieved by raising viscosity with bright stock to that of the reference high V.I. oil. This led to his conclusion that V.I. improvers have distinct limitations and do not decrease oil consumption characteristics to the extent which might be indicated from a literal interpretation of viscosity and V.I. values obtained in the customary manner with the Saybolt and kinematic viscosimeters.

The explanation for this last effect was advanced as the peculiarity of these viscosimeters themselves, which do not duplicate the high shear rates found in the engine. Hence, the viscosities so determined do not represent true viscosity of the oil in service, where basic natural viscosity and V.I. is the controlling factor in high consumption from this cause.

He reiterated that it was not his intention to condemn V.I. improvers; rather he was indicating need for fundamental work on performance of V.I. improvers and, in particular, desiring to point out that they should not be used indiscriminately without due regard for their apparent limitations.

Additive Men Answer

Additive manufacturers promptly stated that consumption tests they had run with additive and nonadditive oils indicated the engine did not know which was being used, while consumption appeared to be a function of Saybolt viscosity. Second, they pointed out that V.I. improvers are intended to do just that, and are *not* intended as viscosity improvers. Third, they believed the motorist was more interested in saving his battery at low temperatures than in buying a quart of winter oil more frequently. In general, they agreed operating speeds and engine mechanical condition could readily mask high consumption from inherent oil qualities.

Criticism of oil industry representative J. P. Steward, Socony-Vacuum Oil Co., Inc., showed its own field consumption tests indicated consumption increased considerably at higher speeds and as wear occurs; is a function of viscosity no matter how achieved. The advantage remains with the high V.I. oil, he contended, since easy starts in cold weather are most important to motorists. He said further his road tests did not indicate that high consumption paralleled use of oil having V.I. improvers and engines seemed insensitive to their presence.

New Diesel Oil Described

Development of a new additive containing heavy duty oil for Diesel engines was described by J. A. Edgar, J. M. Plantfeber and R. F. Bergstrom, Shell Oil Co., Inc. They reported that it not only reduced wear—from all sources—beyond that ever achieved before, but it also promotes engine cleanliness, has high oxidation stability and the additives are more stable than the conventional materials at high operating temperatures. A reduction in wear of up to 90% was reported as having been achieved. The additives themselves were not identified, however.

The authors explained the oil had been developed originally to reduce down time in laboratory test engines and, subjected to the customary fuel and lubricants endurance, cleanliness and corrosion tests, had produced results indicating these tests were no longer adequate to measure the new oil. In service they reported an engine showing 0.017 in. cylinder wear in 1,000 hours operation had run for 3,172 hours with the new oil and showed only 0.0005 in. cylinder wear.

Octane Numbers Discussed

Of interest particularly to gasoline manufacturers were two papers on road rating of automotive fuels. The first, "A Proposed Road Octane Number," by F. R. Watson, F. H. Caudel and J. D. Heldman, all of Shell, develops a correlation between conventional Motor and Research octane numbers wherein the reference number fuel knocks in exactly the same percentage of cars on the road as does the gasoline under consideration. A formula is developed where the laboratory knock data are applied to achieve this result.

The second, "A Proposed Single Cylinder Laboratory Procedure to Predict Road Anti-knock Performance," by F. T. Finnegan and E. M. Clancy, Jr., Pure Oil Co., described the modification of a CFR test engine with a high speed crankcase, aluminum piston, high lift camshaft and altered fuel induction system plus knock instrumentation. This permitted correlations to within 1.5 octane numbers of that obtained on the road with a quart of sample. It is not intended to replace road test work completely.

Gasoline Consumption

(Figures from state tax bureaus)

AUGUST

California—4.6% increase—279,542,189 gals. in 1948.

North Dakota—18.3% increase—33,943,836 gals. in 1948 compared to 28,698,606 in 1947.

SEPTEMBER

Arkansas—17.5% increase—29,667,309 gals. in 1948 compared to 25,244,364 in 1947.

Colorado — 7.9% increase — $2,488,613 collected in 1948 compared to $2,306,215 in 1947.

Delaware—6.4% increase—6,631,137 gals. in 1948 compared to 6,231,467 in 1947.

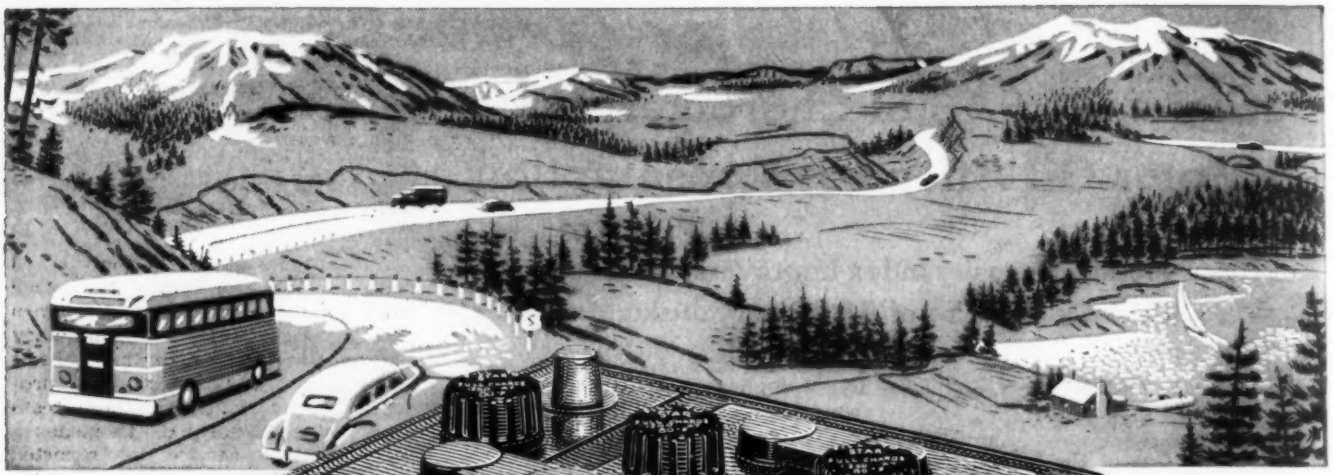
District of Columbia—8.3% increase—13,742,476 gals. in 1948 compared to 12,684,744 in 1947.

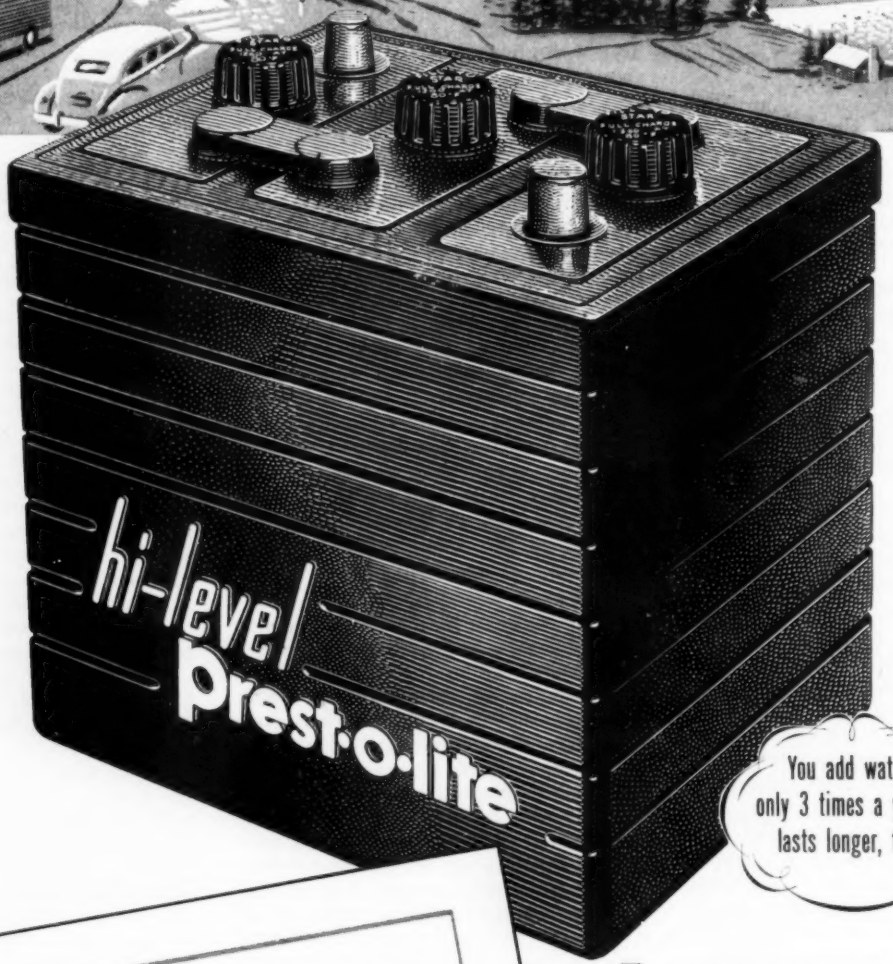
Florida—5.8% increase—46,479,020 gals. in 1948 compared to 43,937,570 in 1947.

Oklahoma—8.8% increase—$2,407,484 collected in 1948 compared to $2,212,156 in 1947.

Oregon—15.3% increase—48,173,451 gals. in 1948 compared to 41,799,016 in 1947. Consumption during first nine months of 1948 exceeded 1947 consumption by 10.0%.

Rhode Island — 8.0% increase — 13,990,498 gals. in 1948 compared to 12,955,702 in 1947.





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Editorially Speaking

Oil Should Start Now to Build a Strong Defense Against Political Encroachment in Next 4 Years

THE oil industry undoubtedly can count on the next four being its most difficult political years.

In view of all the unfair and false statements that Truman made to win his presidential campaign and his antagonism toward business during his past administration, any industry—especially oil, which was at times singled out for special mention—would be foolish indeed to sit unprepared for any but the maximum politically possible of supervision and even downright control. While Truman spokesmen now assure that no "honest" industry need fear his carrying out his pledges, the trouble is Truman, just as did his predecessor, keeps changing his definition of an "honest" business to meet his desire for more political strength and in order to expand his bureaucratic power.

But in addition to the natural desire to carry out his radical pledges, there are plenty of strong anti-business and radical groups who are going to demand that he pay off in full for their election support, and each group is stating with magnification how much that support was. For instance, according to the labor unions, they alone pretty much put him in office even though in Ohio Truman got his small 18,451 lead over Dewey by reason of the 200,000 votes that the Democratic candidate for governor, Lausche, won over the union-endorsed Republican candidate, and Lausche was decidedly not endorsed by the unions.

We will hear much in these coming years about how Truman was given a "mandate" by "the people" for the enactment of this and that kind of legislative control of the country's economic system and of industry and how Truman, by reason of his one-man battle for these various controls, is the one to determine their extent and character. It behooves industry, and the oil men, to make plans to have it clearly pointed out to Congress and the public just what these so-called "mandates" are and just exactly what they are not.

That a large number of Republicans stayed home still does not mean that they have lost all rights to have their opinions considered in deciding these important questions. Even though they can be severely criticized for sleeping on their rights they have not forfeited them. Also, that Dewey and the Republican manager were so foolish as to ignore the issues that Truman brought up or that his false charges implied, still does not mean that the wishes of almost half of the people who voted and who opposed Truman, are to be brushed aside. Bare majorities are not justified in claiming dictatorship nor can minorities that are almost majorities be ignored.

Therefore, regardless of the great blame that can be handed the Republican party management, this ALMOST majority should insist on having much to say about these alleged "mandates" as they are not yet living in one of Stalin's countries. It may still be properly argued, therefore, that the 80th Congress, which Truman so much condemned, spoke for something close to, if not even a majority of the people, and that the acts of that Congress still would be heartily approved by a majority if the issues were presented fairly and squarely and in such a way as to get a sufficient number of the people to the polls.

Therefore, this possible actual majority should step forward, as late as it may be, and have its say and keep on having its say for the next four years on all acts of Congress. This possible actual majority should reject unequivocally any argument that "the people have spoken and you should abide by the result." Such fundamental issues as Truman presents to the American people, are too basically important to the country's welfare, to let anything but a vastly overwhelming majority have its way.

So the task that lies before industry, and oil, is to make the fight that the Republican Party and its candidate should have made and to make it with all the vigor that Dewey should have used. Basically that fight is to get before the American people and their representatives in Congress and in government, all the facts that pertain to the issues of business and to see that those facts are fully understood.

Falsehoods Should Be Combatted

To speed discussion by the oil industry on the need for making the best fight it ever dreamed of making, the writer ran a strong editorial in Platt's OILGRAM News Service Nov. 3. In it he said that falsehoods against business should be combatted vigorously no matter if they do come from the White House. Refuting Truman is one of the jobs the Republican management ran away from. But when one accused retreats from a candidate who hurls falsehoods at him, not only does the candidate come to think that what he is saying is true, but so also does the public and that alone had much to do with the votes that Truman finally got. The oil industry too long has let too many people lie about it.

Then in the OILGRAM of Nov. 5, which was delivered at Chicago for the opening of the API annual meeting, we set forth roughly a possible procedure for the oil leaders either through the institute or by an outside grouping, to organize the industry, or such of it as care to fight, to carry on a worth while fight against unjust attacks on the industry and also to do the long time job of getting the public educated and keeping it edu-

cated as to why private enterprise in the oil industry should be maintained.

The troubles now before the industry and those which will come in the future are far too serious and deep seated to be delegated to outside experts to write a few advertisements, or some nice pieces for the papers, or have a few oil men make a few speeches. Too many of the troubles, we are afraid, are now based on downright hatred of big business that makes a profit. Too many of them also, are based on, to put it mildly, at least cordial dislikes within the industry of the major oil companies.

A certain amount of this hatred had existed for years but Roosevelt, who made no disguise for his feelings, fanned this hatred.

Truman when he thought his fight hopeless, also applied more oxygen to this hatred and with venom on his tongue.

So with hatred to contend with, the oil industry, and most all other big business, has a much bigger job on its hands than if the trouble was just due to "misunderstanding." Especially with the "Commies" always hanging about.

NPN therefore has suggested to the leaders of the oil industry that they at once select a group of a dozen or 20 top executives of big and small companies—not necessarily members of API but all operating in the oil industry—who have some understanding of public thinking.

This group would list all the possible problems of the industry that might be created by the Truman administration and that might arise internally within the industry. Then they would write the specifications for the men and their organization, best able to cope with these problems, and then proceed to find the men to meet those specifications and put them on the job. The main trouble will be in finding the right men but it must be emphasized to the oil companies that if they have the right men they must take a long range view of giving them to this activity for the cost to the companies and to the industry, if the men are not made available, will be simply tremendous.

The men who may be selected to do this industry defense and offense job must not only be able to plan and operate a campaign of education to stockholders, employes and the public but they must have such knowledge and such standing within the industry that they can prevail on individual companies to do their own fighting, especially when the attack is on the company rather than on the industry. Also, these industry men must be able to prevail on the interested companies to smooth out friction within the industry which has prompted every attack on single companies and the industry for many many years.

Two Vital Issues Demand Attention

These men should also be able to take hold of two vital issues within the industry today and in a perfectly legal manner bring about satisfactory settlements of them. We refer to the demand of the Independent marketers for wider margins and their threat to again seek a law to divorce all branches of the industry from the parent companies. Inasmuch as any need for wider margins turns on the facts, those facts should not be hard to get and to be judged fairly.

Inasmuch, also, as practically every major oil company is now operating activities of producing, pipe lining and refining, and a number of the largest with separate subsidiaries in marketing, it should not be an impossible task to settle the demand for divorcement, especially as some of the advocates of divorcement frankly say they do not seek divorcement in and of itself but only because the majors turn a deaf ear to what the marketers believe are their just arguments for wider margins.

Anyway, maybe a separation in the financial statements of the main divisions is on the way in view of how the major companies have divided their operations for many years. The next step is to disclose these breakdown figures. The chief interest of the major's competitors in the breakdown is to make sure that the majors are not taking unfair advantage of them by subsidizing marketing with profits from other operations. Legislation to bring divorcement about could easily go considerably beyond even divorcement, something in which the Truman administration probably would be much interested. Hence, it might be a lot simpler for the majors to breakdown their operations and make the breakdown public, before they have to be joined with other manufacturers in other lines in what seems to be a growing movement to force complete separation of important business operations.

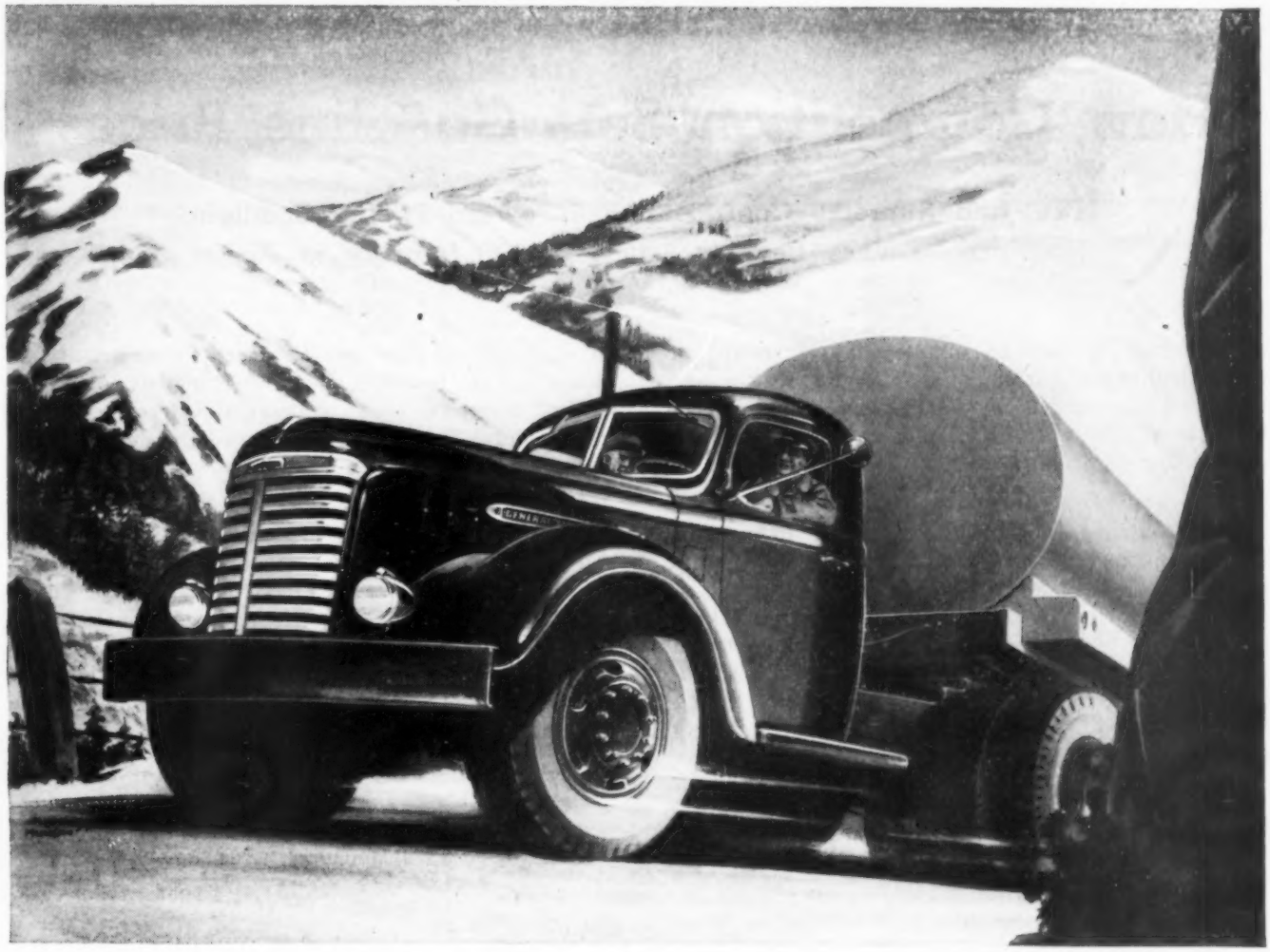
And most important, these men who operate the defense of the industry must have such skill and understanding and so much of the confidence of the oil industry, that they will be allowed to speak instantly against any untruthful or unfair attacks on the industry. This does not mean necessarily in defense of an individual company, but in defense of the whole industry. However, as regards the individual company attacked, these men should have such standing as will permit them to prevail on the company concerned to answer at once on its own. The industry and the oil companies have been exceedingly slow in answering such unfair attacks, so slow that the final denials hardly make a dent in the public's misbelief.

Then this group of men must be continually on the alert to signal to the whole industry what trouble may be coming over the horizon and to help companies and the industry to prepare against it.

Then there is the tremendous story of how well the industry is working in the public interest, what it is bringing forth that reduces operating and living costs, how it increases useful products in other industries and makes for the well doing of not only all business and farming but the regularity of employment and brings more joy and comfort into the homes of America.

All this must be done in innumerable ways and on a far larger scale than any industry has ever done it. Other industries should do it also, but oil cannot well afford to wait on them because to wait is to allow those who would radically change the American way of life to have more and more opportunity for their propaganda until the time might come when it would be too late. That is what has happened in many countries and it must not happen here.

READERS' comments and opinions will be much appreciated by Warren C. Platt, NPN's Editor and Publisher, 1213 W. 3rd St., Cleveland 13, Ohio.



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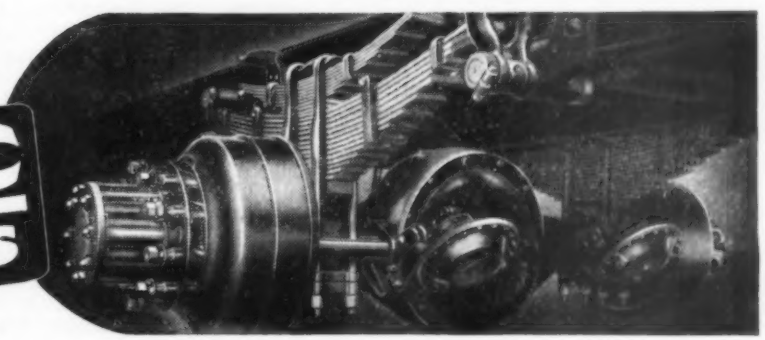

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How Competition Sets Gasoline Prices—A

FTC and Supreme Court Attitudes Toward Pricing Spotlight Harvard Business Review Article on Oil Industry in Action

The story of how an oil company, Standard of Ohio, determines gasoline prices to its dealers and at its service stations is told in the current issue of the *Harvard Business Review* in an article "Pricing of Gasoline—a Case Study" by Edmund P. Learned.

By special arrangement with Dr. Learned and the *Harvard Business Review,* NATIONAL PETROLEUM NEWS is publishing the entire article, dividing it into four chapters, the first of which appears this week.

The article itself explains the background of the study, which took more than a year, and the decision by Sohio to permit Dr. Learned to publish his findings, including heretofore confidential memos giving the detail of various local price disturbances during the period covered (1937-1947).

While the study is confined to the state of Ohio, NATIONAL PETROLEUM NEWS believes that oil marketers everywhere will be interested in it. Publication of the study at this time is especially important because the oil industry, like other industries, is operating under the cloud of uncertainty created by recent Federal Trade Commission rulings and Supreme Court decisions on pricing practices.

These rulings and decisions arise from some basic misunderstandings about prices on the part of commissioners, judges and others whose theories too often lack the substance of practical business knowledge. Dr. Learned's article, in addition to its obvious interest to the oil industry, might serve to impart some facts about pricing to those in government and on the bench who have more power over business than information about it.

Though the title may seem unexciting, the article is a most readable and practical account of 10 years of pricing practice, packed with facts about operating policies, price wars, and dealer relationships.

By EDMUND P. LEARNED*

This article is a case study of the prices to dealers and prices to consumers at company operated stations for "regular grade" gasoline of the Standard Oil Co. (Ohio) for the period from 1937 through 1947. The management of that company had asked the author, as an outside consultant, to summarize historically the facts regarding these prices for the internal use of its officers and marketing executives. It soon became clear that this material would be of value also to people outside the company—both to those who are directly interested in price theory and marketing practice and to those who are more generally concerned with promoting better understanding of the realities of business life.

State-wide prices had been posted by the company in the Midland Building in Cleveland for years and had been printed in trade journals, and local variations from these prices had been issued to the marketing divisions in price letters and were public knowledge of the trade in the areas affected. It was, therefore, a further step in the same direction for the company to grant the author permission to use the historical facts included in this article.

It should be noted, however, that any interpretation of the economic or social significance of these facts or any statement of issues implicit in this body of material is the author's sole responsibility. The company has not been asked to approve the author's interpretations and may disagree, of course, with some of his remarks.

Few companies have been willing to reveal as much of their own thinking and policies as is contained in this article. The author wishes to acknowledge publicly his appreciation of the forward-looking, enlightened attitude which has prompted the release of this material and has thus made available, to marketing experts to economists, and to the public in general, this "inside look" at how management reacts to markets and how it deals with the price-making process.

Purposes of the Study

Goal of the study is to show how economic theory works out in practice

One of the major purposes of this article is to help bridge the inevitable gap between economic theory and everyday fact. For this reason the contents that follow should be placed in their proper setting in economic theory.

Economic Theory

According to the definitions of many economists, a large share of American business is conducted under conditions of "monopolistic competition." When types of competition are arranged on a scale, at one extreme there is pure competition, next a wide band of monopolistic competition, and finally a very small range of pure monopoly. In pure competition, products are standardized and no seller or buyer is large enough to have any control over price. In pure monopoly, on the other hand, it is assumed that the monopolist has a capacity, through his control of supply, to set a price which will maximize his net income, usually but not necessarily at a higher price than would prevail under pure competition.

In the wide in-between band of so-called monopolistic competition products are differentiated, branded, and advertised; particular suppliers are likely to render services that make them unique in some degree from other suppliers; and it is assumed that individual sellers (or buyers in special cases) are few enough in number so that each has a significant effect on price, sometimes a strong

* Professor of Business Administration, Harvard University Graduate School of Business Administration; private consultant to business. Article published in Harvard Business Review.

Detailed, Fact-Packed 10-Year Case Study

enough effect to be described as "price leadership."

It is further assumed that because the number of competitors is relatively small, each can watch the policies of others and modify his own behavior accordingly. The economists generally assume, also, that there is a minimum of price competition and a maximum of other forms of competition for advantage, and that prices under monopolistic competition tend to be higher than under pure competition.

Much of the reasoning of economists has been based upon assumptions too often unrelated to reality. Their conception of consumers' behavior is not always corroborated in the businessman's experience. Their assumptions concerning the businessman's response to cost considerations are frequently incomplete or wrong. Given their assumptions, they reason effectively to theoretical conclusions.

Business Should Furnish Facts

It is one point of this article that businessmen should furnish more facts about price making in order that economists will have a basis for their theoretical analysis and will not be forced to reason in a vacuum. This is particularly important in view of the fact that legislators and public policy makers frequently use the theoretical conclusions of economists as the basis for social judgments or legislation regarding the process of competition and the scale of business organization. The good economist knows the limitations of his theoretical methodology and appreciates the wisdom of checking his assumptions against facts, but there are many other people who do not.

In theory the descriptive words, "monopolistic competition" and "price leadership" have a technical meaning, and there is no ethical or moral tone attached directly to them. In fact, however, many economists, if not the majority, behave as if monopolistic competitors and price leaders were guilty of something antisocial. No doubt some are, but certainly not all. In view of the complexity of business and the many forms of so-called monopolistic competition, it seems unwise to make sweeping generalizations.

Sound social policy can only be based upon a careful study of specific cases. It is altogether probable that one can draw conclusions from the case study in this article, or even from the oil industry as a whole, and yet be unable to apply them automatically to another industry without first investigating the detailed facts of market behavior and business organization in that other industry. As a matter of fact, much of the significance of this article lies, not in any possibility of generalizing on its specific findings, but in the cumulative effect of the data in demonstrating how dangerous such generalization would be.

When the author told the executives of the Standard Oil Co. (Ohio) that economists would describe the company as a "monopolistic competitor," they said that they did not like the term. To them, it suggests collusion and abuse of power, and both are anathema. As executives faced with the pressure of many different forms of competition for advantage by quite a variety of competitors, they would place great emphasis on the word "competition" and none on the word "monopolistic." The author urges the reader to look at the facts presented and to judge for himself whether the emphasis should be upon the word "competition."

Everyday Fact

It is the intent of this article to describe how the company's prices are determined and, more particularly, under what conditions the company leads prices up and why in general it follows the market down. Both prices to consumers at company stations and prices to dealers will be discussed; these are separate business problems blended together in different ways in different localities. Looking at the failures and the success of the company in so-called leadership and examining the extent to which the company is able to lead or "gets pushed around" will give some idea of the degree of control which a so-called price leader has. Why the company has to experiment in pricing will become apparent as the data are presented.

Aside from facts bearing on these broad questions of monopolistic competition, there will be descriptions of company policy on: (1) the level of prices to be quoted (high or low?); (2) the use of state-wide prices and local prices; (3) the company's responsibility to the industry and the public for not injuring small competitors and small business by "throwing its weight around" through indiscriminate price cutting. The action responses of the company to

The Author

Edmund P. Learned has been associated with the Graduate School of Business Administration at Harvard University as a student, instructor and professor since 1925. During most of that time he also has been a private consultant to business, specializing in the textile and oil industries.

He was graduated from the University of Kansas in 1922 with an A. B. degree in economics. From 1922 to 1925, he was an instructor in economics at Kansas, at the same time doing graduate work so that he could obtain his M. A. degree in 1925.

From 1925 to 1927 Dr. Learned attended the Harvard Business School, receiving a master's degree in Business Administration in 1927. He started as an instructor in the school in 1927, rising to the rank of professor of marketing in 1939. In the meantime, he obtained his Doctor of Commercial Science degree in 1930. At present he is professor of business administration. He has had intimate contact with business throughout his years at Harvard.

Dr. Learned's younger brother, S. S. Learned, is chairman of the Operating Committee of Phillips Petroleum Co.

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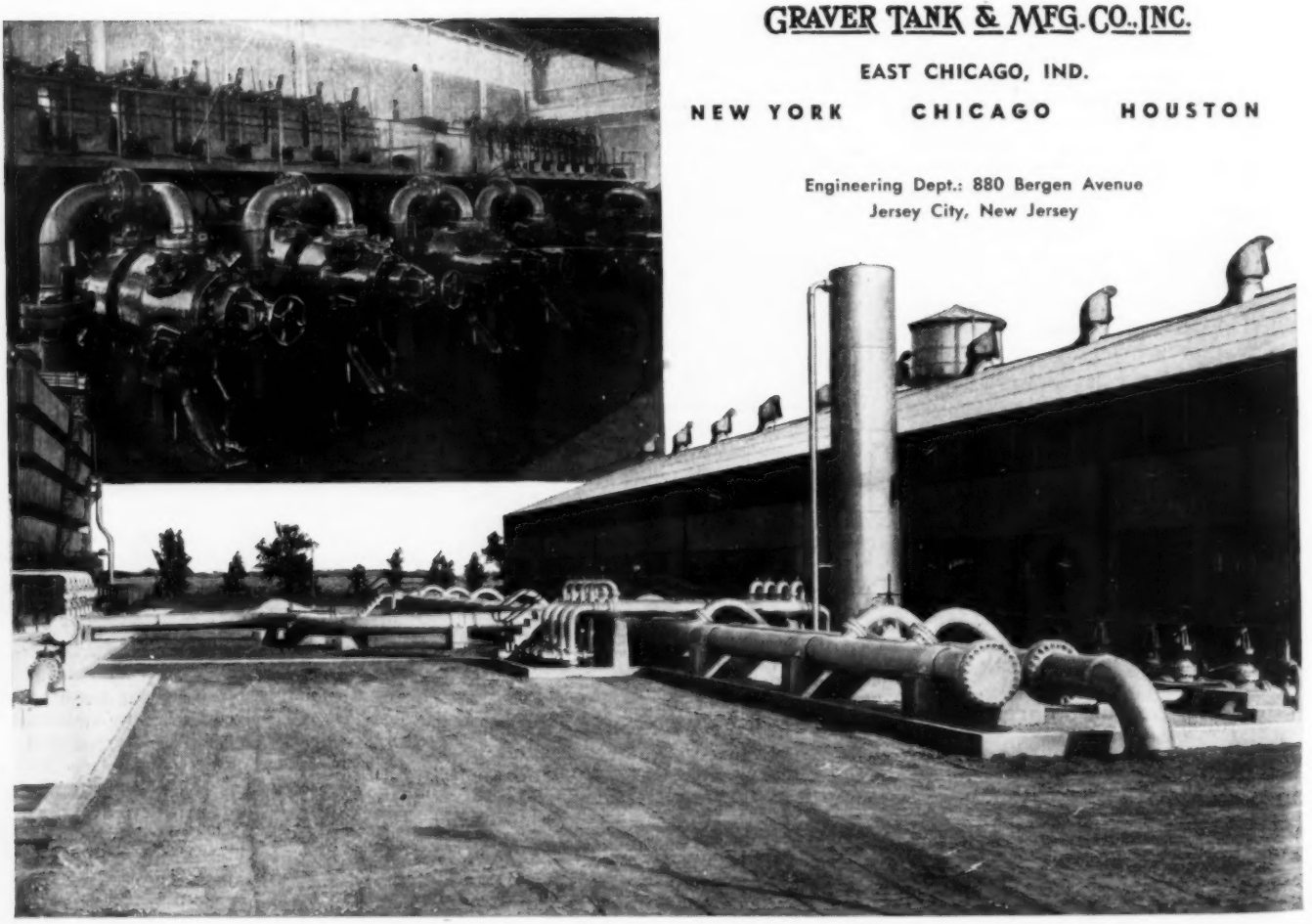


changes in volume resulting from competitive behavior and to market patterns set by local competition will be portrayed.

Numerous other questions of public or business policy will be apparent in the evidence. It is not possible within the scope of this one article to examine every question suggested by the facts. Actual pricing practice is made up of many moves (some major, most of them small) made in response to changing conditions. It is this necessity to adjust currently to the dynamic situation which makes pricing practice different from the theories.

Background Information

Price problems arising with one company are fundamental and apply to the entire industry

The reader may ask whether a case history of this company is representative of the oil industry as a whole. The answer is more "yes" than "no." It is unmistakably "yes" with respect to (1) the forces at work in gasoline markets in the United States and (2) the problems faced by a price leader in stating prices on rising or falling markets. These are fundamental problems, and the Standard Oil Co. (Ohio) does account for enough of the sales in its own market, as will be evident later, to raise questions about price leadership.

The answer is "no" in the sense that every so-called price leader may have some unique aspect to his policy which differs from the practices of other leaders in other markets. Some market leaders aim to set uniform prices for states or natural marketing areas, whereas other leaders build up local prices upon the basis of a price at refining points plus handling charges and margins, making local variations from such price structures only to meet competition.

Unlike this company, many market leaders do not quote a retail service station price at a substantial number of stations; they have for the most part leased the service stations they formerly owned and operated to dealers who are entitled to name their own prices and to establish their own dealer spread or margin between the prices at which they buy and those at which they sell.

Partly Integrated Now

To understand the price policies of the company, it is desirable to have a clear picture of the company and the business environment in which it operates. The Standard Oil Co. (Ohio) was one of the Standard Oil companies whose stock was distributed to the stockholders of Standard Oil Company (New Jersey) as the result of the decree of the Supreme Court of the United States entered in 1911. It was not then an integrated company possessing balanced crude resources, pipe lines, refineries, and jobber and retail marketing facilities. It may be classified in 1948 as a partially integrated company.

In recent years the company has integrated backward into crude production and has developed both crude and product pipe lines and river transportation. Most of the development of crude production has been since 1941, however, and the company is still a large net buyer of crude oil and probably will be for some years to come. The price of crude is therefore significant to the company's gasoline price policy.

The company has also modernized its jobber facilities, that is, bulk plants and terminals, and has added to its retail service station facilities. Some of the latter are company operated; the majority are leased to dealers. A large number of other dealers who own their stations or rent them from private landlords handle the company's products.

The company is the only Standard Oil company operating under that name in Ohio. The coined name "Sohio" has become synonymous with the official company name and to a great extent has become substituted for it. Individual brand names like "X-70" for regular-grade gasoline and "Supreme" for Ethyl gasoline have been developed for particular products. So far as this article is concerned, the company operates in two different markets: the retail market and the jobber market.*

Retail Market

As an operator of company service stations, the company quotes service station (S. S.) prices to consumers. In this market it sells in competition with dealers who offer: (1) the advertised brands of refiners, (2) the brands of jobbers who sell to dealers (or operate chains of service stations), and (3) private brands (sold principally by so-called trackside operators).

In some or all of the counties that it covers, Sohio competes with dealers of other Standard Oil companies or their successors and affiliates: American Oil Co. (an affiliate of the Standard Oil Co. of Indiana), Atlantic Refining Co., Ohio Oil Co., Socony-Vacuum Oil Co., and Pennzoil Co.

The company states that it has no connection with these former Standard Oil companies. In fact, its officers are proud of the fact that Sohio is one of the smaller members of the industry in terms of size. They like to consider themselves independent, and one of their officers stated their attitude in a public hearing as follows: "The company is smaller than some so-called independents, and more independent than any."

It is also in competition with the dealer outlets of the following additional so-called major oil companies: Cities Service Oil Co., Gulf Oil Corp., The Texas Co., Pure Oil Co., Sinclair Refining Co., Sun Oil Co., and Shell Oil Co. Prominent nearby independent oil companies competing in this market are: Ashland Oil and Refining Co., National Refining Co., Allied Oil Co., Quaker State Oil Refining Co., and Freedom Valvoline Co. In addition there are approximately a dozen small refineries in Michigan, Kentucky, and Pennsylvania selling gasoline to dealers in Ohio.

Private Brand Competitors

An important type of dealer in the retail market is the so-called trackside or trackage operator. Originally such dealers erected stations with large tank capacity at the side of railroad tracks and received deliveries in tank car quantities—often of low-quality gas, so that the term "gyp station" was sometimes applied to them. These stations typically sold private brands. They were great shoppers for low-cost gasoline; and in by-passing the bulk plant of the oil company or the jobber they eliminated a large part of the wholesale expense and were therefore able to cut the costs of distribution and offer consumers a price appeal.

But now, although the term "trackside" is still applied, an evolution has occurred. There are hundreds of stations with private brands selling primarily on the price-appeal basis, but they are no longer necessarily located next to railroad tracks. Some of the enterprising operators saw the advantage of large quantity, motor-transport deliveries direct from refinery or pipeline terminals to other than trackside locations. They arranged with their suppliers to obtain a cost advantage arising from this method of delivery.

Moreover, as cracking facilities of the industry increased during the 1930's, these operators obtained a better quality of gasoline. Consumer experience and technical tests showed that this gasoline was usually of satisfactory quality. Some oil companies, including Sohio, which offered premium and regular gasoline, at first tried to meet the new competition with a lower-priced, so-called third-grade gasoline, but found this less and less effective. For that reason Sohio after four years of experimentation with third-grade gasoline dropped its sale during 1936 and

* When Dr. Learned uses the phrase "jobber market" he is referring to that part of its operation in which Sohio performs a wholesale function (selling to its dealers) as distinguished from that part in which it performs a retail function (selling at salary-operated stations). As used in this article the phrase "jobber market" has no connection with Sohio's sales to Independent jobbers which Sohio handles through a wholly-owned subsidiary, Fleet-Wing Corp.

1937 and decided that trackside competition had to be met by price changes in regular gasoline.

Some of these trackside dealers have also improved their service station facilities and have offered more services to customers. In a few instances they now sell the brands of major oil companies.

The Jobber Market

Over half of the gasoline sales made under the Sohio brands are accounted for by dealers to whom the company quotes a dealer price for the delivery of gasoline from its bulk plants or other distributing points. As most readers know, a bulk plant consists of storage tanks, handling equipment, and some warehouse and office space. In this so-called jobber market, the company competes with the oil companies listed earlier (or with jobbers representing them) and with jobbers who have their own brands and shop the markets for supplies.

There is plenty of opportunity for such "shopping." The Ohio market draws upon many refining areas in meeting its demand for gasoline. Depending upon market and price conditions, the supply of gasoline comes by pipe line, boat, barge, or tank car from the refineries of Ohio, Pennsylvania, Kentucky, Illinois, and Michigan, from the Mississippi River refining points, from the Gulf and Midcontinent refineries, and from the Chicago and Detroit refining centers.

Both the retail and the jobber markets have been affected by three significantly different sets of economic conditions marking the 11-year period reviewed here: (1) There was the post-NRA period of adequate supplies of gasoline. This ran from 1937 through 1941 and included a major recession in 1937, a recovery in 1938 and 1939, and a prewar expansion in 1940 and 1941. (2) The second major set of conditions was the regulated price and margin period of the war, which will be given little attention in this article. (3) Since 1945 there has been a third period of unprecedented demand for gasoline accompanied by general inflation in the country.

Practice of Posting Prices

When the present Sohio management took over in 1928, the company had dropped from an earlier figure of over 45% of total gasoline sales in Ohio to as low as 11%. After the decision in the dissolution suit in 1911, Sohio, like some other Standard Oil companies, had really held an umbrella over the market through its high-price policy. Companies following such a policy furnished the targets at which old and new competitors could shoot—for example, competitors like Gulf and Shell which were becoming stronger factors in the industry and some of the older companies which were entering new territories.

By price concessions, equipment deals, financial aids to dealers, and other devices, competitiors took business away from them or kept them from getting their former share of an expanding market. Sohio was not the only company to realize by the middle or late 1920's that it could ill afford to ignore the competition.

The new management of Sohio, by aggressive merchandising and promotion methods, modernization of transportation methods, and rearrangements in sources of supply, along with a more realistic price policy, was able to stop the downward trend in its sales position and to start sales up again.

By 1930 the company had almost reached 30% of total sales in Ohio. The company suffered a reversal of trend between 1933 and 1936 which it attributed to the inflexibility of the NRA arrangements. Under the conditions then prevailing the company did not consider the establishment of 2-cent margins for jobbers and 4-cent margins for retailers under the NRA code to be economically sound. It went along since it felt compelled to do so, but because of secret price cutting by competitors below the level set by the government its percentage of total sales dropped to 20%.

Finding the Economic Level

It is little wonder after two such experiences that the management has been concerned with finding the genuine economic level for prices and quoting those prices to dealers and consumers. The reader will understand that in the following discussion of the company's efforts along this line all statements, unless otherwise noted, refer specifically to the period being studied, namely, 1937-1947.

The posted service station or S. S. price is a state-wide price, posted from time to time at the Sohio office in the Midland Building in Cleveland. It is the price at which the company sells to retail customers at its company-operated stations. The average realized S. S. price may differ from the state-wide posted price because of reductions which apply to certain cities or stations.

The company similarly posts a statewide dealers' price. Exceptions to this price are made for particular cities or areas as circumstances require, and for that reason the realized dealer price may be less than the state-wide posted price. Exhibit 1 includes curves on the posted and realized dealer prices.

The difference between the service station price of an independent dealer and the dealer price that he pays the company is the dealer margin. The company does not post such a margin. Dealers buying from the company name their own selling prices. The difference between company posted S. S. prices and dealer prices will be referred to from time to time as a "posted" dealer margin —but the word will always be in quotes as a warning to the reader that it is a convenience of writing and not a company practice.

Company Price Policy

Data on company price policy, which is of course the essence of the article, were obtained by the author in two principal ways.

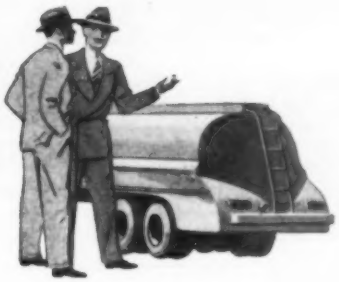
First, company files were surveyed in order to build up the historical record of price actions; and, in order to have a cross section of factors at work in different local markets, the Akron, Canton, Springfield, and Toledo markets were selected for intensive study. Price letters, memoranda, field correspondence on the price and competitive situation and home office answers thereto, and market surveys of the price situation with substantiating photographs of prices in competing stations or own dealer outlets were gathered and examined. Internal memoranda written over the years, often under stress of everyday work, helped materially in piecing together the story of company price policy. These memoranda were not prepared for publication; they were working documents, from which some quotations are made in this article in order to give the reader the flavor of current events and feelings.

Secondly, the vice president in charge of sales was requested to make a written statement of price policy. This independent approach was made in order to determine whether the policy at the field operating level was the same as that understood by the president and the board of directors. The following statement of policy by the vice president, with its supporting explanation, was found to be a very accurate summary of the company's actual behavior during the period being studied:

"Marketers in a free economy very properly charged the customer the highest price that in their opinions they can afford to ask. The soundness of market prices, therefore, depends upon a full understanding of all those factors which place a ceiling on the asking price, since it is just as important that one's asking price be not too high as it is that it be not too low.

"The judgment of marketers in setting prices should be affected by such immediate considerations as the probable effect of the proposed prices on sales volume, the probable behavior

"TRAILMOBILE TANDEMS ARE BEST!"



You'll find trailer users everywhere saying, "Trailmobile Tandems are best."

The evidence is piling up that here, at last, is a tandem suspension so outstandingly superior that no other tandem approaches it in all-around efficiency!

And whether your tank trailer is loaded or empty, you'll marvel at the smooth "ride."

ONLY TWO MOVING PARTS—First of all, this Trailmobile Rocking-Beam Tandem has *only two* moving parts—not hundreds as in some tandems! You'll find no complicated mechanism to get out of order or require constant attention.

BRAKE CHATTER ELIMINATED—Trailer-racking brake chatter—so common to many types of tandems—is *eliminated* with the Trailmobile Tandem . . . empty or under load. You get smooth, even brake application because braking force and load distribution are *always* equalized on both axles. Your tires stay "glued to the road." And since there's no scuffing or cupping to eat away treads prematurely, the tires deliver *full mileage.*

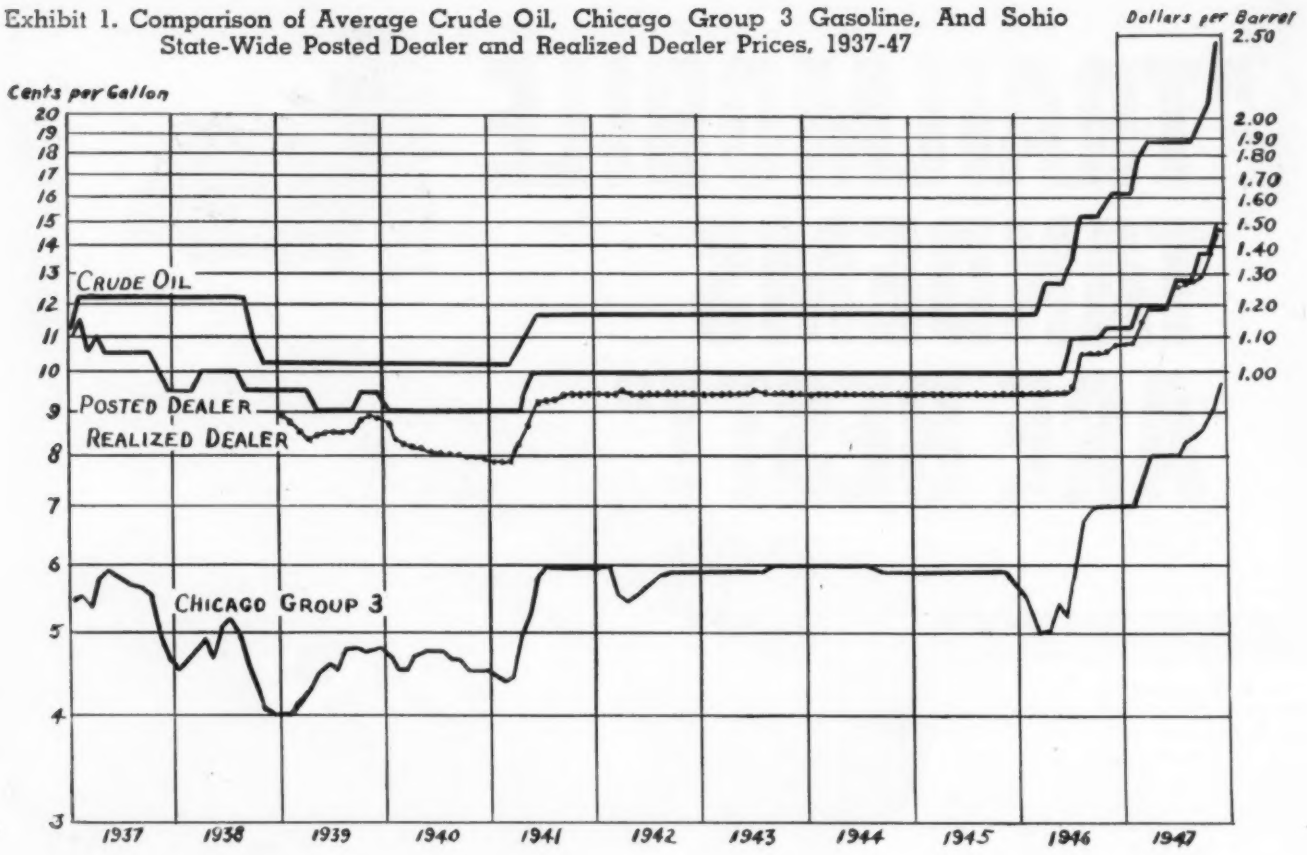
LESS MAINTENANCE—Finally, you'll find that the Trailmobile Tandem slashes your maintenance costs because it has fewer moving parts than any other tandem. In fact, only *two points* require lubrication, as against dozens in some tandems! Also, parts are interchangeable with those of a Trailmobile single axle suspension.

These are common-sense reasons why more and more petroleum haulers in every section of the country are reducing their maintenance and hauling costs by *converting* their present equipment to Trailmobile Tandems.

Learn to your own satisfaction why they're saying, "Trailmobile Tandems are best!" Stop in soon at your nearby Trailmobile Sales and Service Headquarters for a demonstration. Or send a letter to The Trailmobile Company, Cincinnati 9, Ohio and Berkeley 2, California.

TRAILMOBILE TANDEM

Exhibit 1. Comparison of Average Crude Oil, Chicago Group 3 Gasoline, And Sohio State-Wide Posted Dealer and Realized Dealer Prices, 1937-47



of future costs under the influence of the proposed prices, the probable reactions of existing competition to such prices, and the possibility of the encroachment of future competition. Prices in each market should be tailored to their own economic environment, and should be built upon one's estimate of the future, based upon the past. This requires the systematic marshalling of all relevant knowledge and price experience.

"In addition to such immediate price considerations there are many others more general in nature but none the less dynamic in effect. Among these are the general commodity price trends in other industries, the prices of competing items in other industries, the presence or absence of purchasing power, either generally or in a given locality, and that timely factor now so disturbing, to wit the bearing of prices upon the inflationary spiral.

"Historically, our company adopted a so-called state-wide price for gasoline, which represented the highest price it believed it could afford to ask after giving due weight to all those factors which might influence prices.

The Role of Costs

"Our own costs are not of primary consideration in setting our prices, although these in connection with those of the industry may later be used as a check. A distinction should be made between costs as a motivating factor in calling for a re-examination of one's price levels, and costs as a determining factor in setting price levels. In the former costs have a role; in the latter they do not. It is likewise true that on a rising market the attention of management to its price levels is aroused by its costs, while on a falling market the attention of management to its price is aroused by a loss of business.

"The factors entering into setting prices, however, in either case are exactly the same and must be distinguished from those which have only a warning significance. We realize, of course, that we cannot sell indefinitely below our costs, on the one hand, nor can we expect to sell for very long at prices much above those of our competitors, on the other. The fact that we, ourselves, are not making money in any particular market, after our prices have been properly adjusted to the economies of that market, becomes, not a reason for a further raise in that market, but rather a spur to our management to find out why we are not making a profit within the range afforded by our competitors and, having determined the cause, to promptly make a correction.

"Having set our price objectives on the basis of general considerations, we then tailor them to meet local conditions. In times like the present which are dominated by general conditions, including product shortages, most markets have identical prices. In normal times, such as those immediately before the war when local factors became dominant, uniform prices practically disappear in favor of local exceptions.

No Single Market Leader

"In a free market there is, in reality, no such thing as a single market leader or group of leaders. There are usually many marketers in each area whose prices are more or less important to other marketers, depending upon the extent of their distribution. As one of several marketers of that type in Ohio, we find that as a practical matter we can lead the market up under certain conditions, but that politically it is not wise to lead it down.

"Economically, in theory, there might be times when a marketer should lead a market to lower and sounder levels. In a market such as ours, which is highly competitive, such leadership is not necessary. It promotes good industry relations to follow the market down belatedly, thus sharing with others the responsibility for achieving lower levels. Politically, we should not be the

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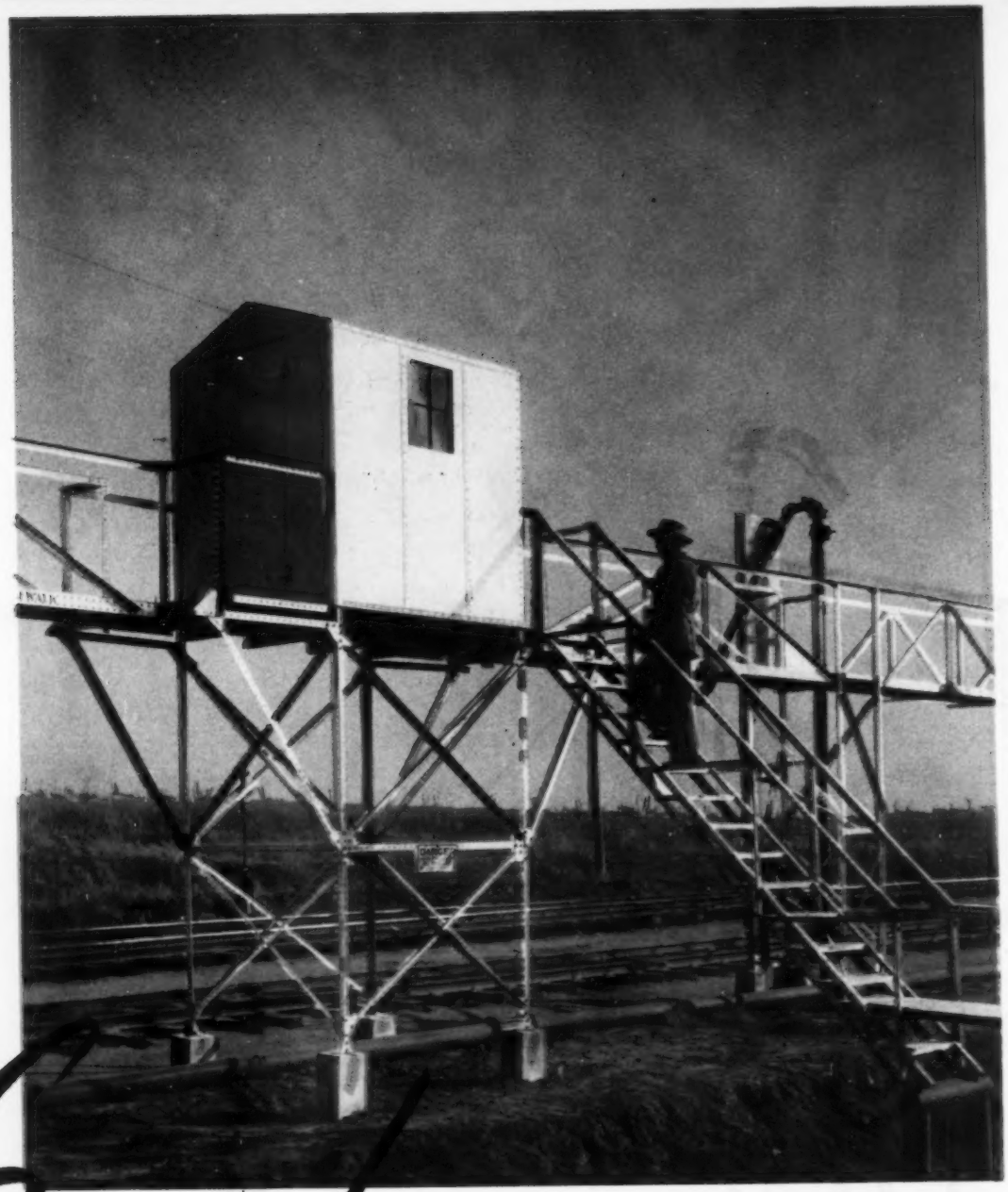

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spearhead which drives uneconomic distribution out of the market. These levels having been set by others, however, we can follow to realistic economic levels.

"On the other hand, in our own interest we must usually take the lead in attempting higher price levels when we believe that conditions will permit. Having a substantial distribution in our market we are confronted with the fact that few marketers, especially those with a lesser consumer acceptance, can take the lead in increasing prices. Upward moves in our market are made by us only when, in our opinion, general prices and the economic pressure from industry costs are such that our competitors in their own interest will follow.

"When We Guess Wrong"

"It is notorious that when we guess wrong, or when we advance our market too far, immediate market disintegration sets in. Competition never fails to take full advantage of any such opportunity, and when it occurs, as it has in many cases, we must retreat until we find the proper economic levels for our prices.

"One of the fallacies often advanced is that so-called leading marketers reduce prices to drive out competition so that they may later enjoy a monopoly. That is like trying to sweep back the ocean to get a dry place to sit down. Competition is impelled by impersonal forces that never scare, and never hesitate for long, and would move in immediately when prices were restored, offering little opportunity to a single marketer to recoup his losses. As a practical matter, selling below cost to drive out a competitor is a sure road to bankruptcy.

"Likewise, the belief that markets may be effectively disciplined by initiating temporary price reductions below economic levels is a similar fallacy. Undoubtedly this has been tried, but if experience proves one thing it is that where industry prices are allowed to seek their own economic levels, as set by free competition, the long run interests of everyone are best served, including both the industry and the public.

"The mere fact that competitors may post prices below ours in itself affords no reason for meeting those prices. It is the policy of our Company to react not to a competitor's prices, but rather to any impact from such prices or policies that may unduly distort our volume.

"Prices must not be considered alone without due regard to the many variables that accompany prices, which, in themselves, are just as substantial an inducement to the consumer as are prices. Among these are quality of product, character of service, convenience of outlets, and a reputation for customer satisfaction.

"In reality, therefore, in any market no two competitors ever offer the customer the same inducements. Each very properly appeals to the trade in keeping with his character and personality. In purchasing new outlets this factor cannot be overlooked, since very often the purchaser of high volume facilities finds in his frustration that he is unable to hold his new bought customers. He overlooks the fact that his appeal may be entirely different from that of his predecessor.

"The market place in a competitive economy provides a continuous customer plebiscite in which success depends entirely upon the ability of the marketer to please the customer, at a profit. No member of the industry can expect in the long run to extract more from the community than he contributes. Even self interests dictate certain moral responsibilities, extra legal, but entirely in keeping with the workings of a system of free enterprise. As marketers, it is unwise for us to throw our economic weight around unduly in any market. If we set prices at uneconomically low levels we unnecessarily injure sound and efficient competitors in addition to taking an unnecessary loss on our own part.

"On the other hand, market confusion, economic waste and political agitation accompany those markets where most so-called market leaders attempt price levels that cannot be maintained. The unwary are trapped by the inevitable crash which comes under the pressure of economic forces growing out of the resultant overdeveloped distribution, and these, in turn, tend to seek relief from their plight in such unsound legislation as fair trade acts, price fixing, etc.

"To summarize in a nutshell, we believe that the essence of sound pricing is trial and error, a purely grass roots function, and that the faithful adherence by members of the industry to realistic economic levels serves alike the interests of both the industry and the public."

The vice president's view of how valuable it would have been to have had this statement at the beginning of the period rather than at the end probably would be shared by other businessmen. For in this instance, as in so many, it is easier to write the policy after it has been crystallized in the crucible of trial and error than it is to state it while trying to determine what the situation requires it to be. In any event, the above statement will be of help to the reader in understanding the actual pricing data which follow.

Changes in State-Wide Prices

Examination of changes shows some of the broader competitive forces at work

Until very recently the company posted state-wide service station and dealer prices. An examination of the changes in these prices throws light on some of the broader competitive forces at work. The changes in the state-wide posted service station prices for 1937-1947, with corresponding dealer prices, are shown in Exhibit 2. Readers are reminded that the S. S. prices apply to consumers buying from company-operated stations, and the dealer prices to dealers buying their supplies from the company. The state-wide posted

Exhibit 2. Summary of Changes in Sohio State-Wide Posted Prices (Ex-Tax) 1937-1947

(Per gallon)

Date	Service Stations		Dealers	
	Posted Price	Price Change	Posted Price	Price Change
2/ 6/37	15.0c	+ ½c	11.5c	+ ½
3/15/37	14.0	−1	10.5	−1
4/29/37	14.5	+ ½	11.0	+ ½
5/ 5/37	14.0	− ½	10.5	− ½
11/ 4/37	13.5	− ½	10.0	− ½
12/24/37	13.0	− ½	9.5	− ½
4/ 3/38	13.5	+ ½	10.0	+ ½
9/26/38	13.0	− ½	9.5	− ½
5/ 5/39	12.5	− ½	9.0	− ½
10/ 7/39	13.0	+ ½	9.5	+ ½
1/27/40	12.5	− ½	9.0	− ½
7/ 1/40	(Tax Increased ½c)			
5/ 6/41	13.0	+ ½	9.5	+ ½
5/29/41	13.5	+ ½	10.0	+ ½
7/27/46	14.5	+1	11.0	+1
11/28/46	15.0	+ ½	11.25	+ ¼
3/12/47	15.5	+ ½	12.0	+ ¾
7/ 9/47	16.5	+1	12.75	+ ¾
10/24/47	17.5	+1	13.75	+1
12/ 9/47	19.0	+1½	15.25	+1½
12/17/47	(No change)		15.0	− ¼

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price to dealers was uniformly 3.5c under the S. S. price until late in 1946 when it became 3.75c under. The spread was increased to 4c in December 1947 for reasons that will be explained in a section discussing dealer margins in some detail.

Between Jan. 1, 1937, and Dec. 31, 1947, there were twelve increases in the posted S. S. price: nine of these were 0.5c each, two were 1c and one was 1.5c. All of the larger increases were in 1947. During the period under study there were seven decreases in the S. S. price: six of these were reductions of 0.5c, and one was a reduction of 1c. On either a rising or a falling market the typical unit of price adjustment was 0.5c because company pumps were adjusted to 0.5c intervals.

The effect of economic conditions on the number of changes in price is apparent. The period 1937-1947 was one of generally rising prices following the period of declining prices after 1929. There were six price changes in the recession year 1937, two in 1938, two in 1939, one in 1940, two in 1941, after which there was government-regulated stability through the war, then two changes in 1946, and finally four changes in the inflationary year 1947. Price changes in the three months of large consumption, June, July, and August, were rare.

The following analysis of statewide posted prices should throw light on such significant questions as: What is the relation of crude oil prices to gasoline prices? Are gasoline price changes made automatically when crude price changes are announced by crude suppliers? Is there a fixed relationship between adjustments in crude and gasoline? What relationship is there between tank car quantity prices and dealer and service station prices? Is there any fixed ratio between these tank car prices and other prices? Does the company use a formula for determining its price structure? Does it use single or multiple basing point prices? Are economic changes and changes in demand and supply conditions for gasoline reflected in its price behavior? What is the frequency of change in its prices?

Relation to Crude Prices

The relation of S. S. prices to crude oil prices is summarized in Exhibit 3. There is no constant or necessary relationship between the amount of a price advance in crude and the amount of a price advance in gasoline. Increases of 0.5c in gasoline prices have occurred with 5c, 10c, 12c, and 25c advances in crude oil prices. Advances of 1c in gasoline have been associated with 20c and 25c increases in crude. Advances of 1.5c in gasoline have been related to 25c and 50c increases in crude.

Moreover, the timing of gasoline price moves has been neither automatically nor precisely tied to changes in crude prices. All the increases in crude prices, however, brought about eventual changes in gasoline prices, as is only to be expected in view of the fact that this company is a large net buyer of crude. The reaction time varied from immediately to a lag of as long as three months. On the advances of January 1937 and May 1941 the lag in gasoline prices was from one to two weeks. In April 1946 a 10c advance in crude had no effect on gasoline, but a second advance of 25c in July resulted in an advance of 1c in gasoline. The 25c increase in crude in March 1947 not only had an immediate effect of 0.5c on gasoline but probably indirectly contributed to the 1c price increase in July. The one decrease in the price of crude during this period was preceded by a reduction in product prices.

Gasoline prices are much more sensitive than crude prices. The state-wide posted S. S. and dealer prices changed fourteen times in the years 1937 through 1941, whereas the price of crude oil changed only four times. The wholesale market for tank cars of gasoline is likewise quite sensitive to changes in conditions of demand and supply, as we shall see from an examination of its economic effect.

Tank Car and Dealer Prices

Public interest makes this aspect of the study particularly relevant

The fact that there has been public interest in the relationship of refinery spot quotations for tank car quantities in the wholesale market to posted dealer prices and service station prices makes this aspect of the study particularly relevant.

The wholesale market is difficult to define geographically because, so far as Ohio is concerned, it includes the large and small refineries located in Ohio who sell to jobbers or spot purchasers, as well as to dealers through their own bulk plants, and also the refineries in surrounding states who come into Ohio. At times it will include refineries from as far away as Louisiana or the Gulf of Mexico.

There are published spot quotations for some of these points, but there is no continuous series for Michigan, Pennsylvania, and Kentucky, states which have immediate influence on the Ohio market. The most sensitive and dependable price series, the so-called Chicago Group 3 price for tank car quantities (monthly averages are plotted on the chart in Exhibit 1), seems to be the best barometer of general market conditions that is available.

The company does not use the Chicago Group 3 prices or any other wholesale prices as the base for setting its prices. On the basis of monthly data, neither its dealer prices nor its service station prices (1) moved up or down simultaneously with Chicago Group 3 prices, (2) moved in the same relative proportion, or (3) during short periods moved in the same direction.

But although the management seems to make little formal use of such wholesale prices in setting its own prices, they do constitute facts to be considered with all the other facts, and there is a certain indirect relation. One of the reasons for this, the author believes, is that the wholesale tank car prices are indicative of changes in the demand and supply for gasoline and that they reflect the impact of periods of depression and prosperity. Even though the total volume of spot sales on which quotations are obtained is a very small fraction of total gasoline sales, these sales have an ultimate though indirect effect on dealer and service station prices. This point will become particularly clear when the details of local prices have been presented.

In the following paragraphs the attempt is made to relate movements in Chicago Group 3 prices to the prices of the company. This analysis in no sense represents cause and effect thinking by the company. It is an outsider's interpretation of economic facts.

Chicago Group 3 prices sagged in

Exhibit 3. Changes in Crude Oil Prices Compared to Changes in Sohio Posted S. S. Prices

Crude Oil*			Posted S.S. Prices	
Date	Price (per barrel of 42 gallons)	Change	Date	Change (per gallon)
1/28/37	$1.22	+12c	2/ 6/37	+ ½c
10/13/38	1.02	−20	9/26/38	− ½
4/ 1/41	1.07	+05	5/ 6/41	+ ½
5/20/41	1.17	+10	5/29/41	+ ½
4/ 1/46	1.27	+10	7/26/41	+1
7/25/46	1.52	+25		
11/15/46	1.62	+10	11/28/46	+ ½
3/10/47	1.87	+25	3/12/47	+ ½
			7/ 9/47	+1
10/15/47	2.07	+20	10/24/47	+1
12/ 6/47	2.57	+50	12/ 9/47	+1½

* Midcontinent 36° gravity.

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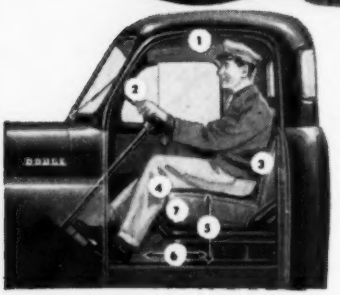
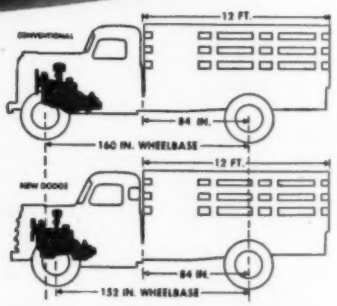
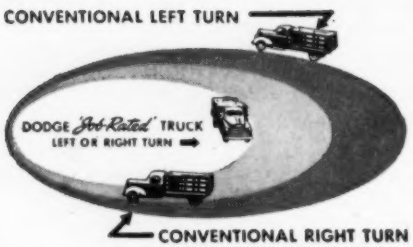




CONVENTIONAL LEFT TURN



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SHORTER TURNING DIAMETERS

New Dodge "*Job-Rated*" trucks provide an entirely new ease of steering and handling. You can turn in much smaller circles, right and left, because of a new type of "cross-steering," plus shorter wheelbases and wider tread front axles.

MORE COMFORT AND SAFETY

1. Plenty of headroom. **2.** Steering wheel, right where you want it! **3.** Natural back support, adjustable for maximum comfort. **4.** Proper leg support. **5.** Chair-height seats. **6.** 7-inch seat adjustment, with convenient hand control. **7.** "Air-O-Ride" cushions, adjustable to weight of driver and road conditions.

BETTER WEIGHT DISTRIBUTION

New Dodge "*Job-Rated*" trucks have *much* better weight distribution. You can haul *more payload*. This has been achieved by moving the front axle back, *under* the frame, and moving the engine forward. More of the load is carried on the front axle. Wheelbases are shorter . . . but cab-to-rear-axle dimensions are unchanged.

DODGE "Job-Rated" TRUCKS

FIT THE JOB . . . LAST LONGER !

Visit the Big Dodge "Job-Rated" Truck and Equipment Show, Madison Square Garden, New York City, November 18-21, 1948

Gasoline Pricing

March 1937 even though there was no change in the posted crude price; the company reduced its prices 1c a gallon to dealers and at service stations. A decided recovery of Group 3 prices occurred in April; the company raised its prices 0.5c on April 29. The Sun Oil Co. did not follow, though most other competitors did, and it was necessary for Sohio to return to the original level on May 5. It is impossible to tell definitely why Sun did not follow the company up, but to an outsider with the advantage of hindsight it appears Sun simply evaluated economic trends better than did Sohio in this instance.

After May 1937 and until February 1938 there was a steady decline in Chicago Group 3 wholesale prices from a high of 5.88c a gallon in May 1937 to a low of 4.50c in January 1938. The deepening business depression of 1937 was clearly affecting the demand-price relationship for gasoline. The posted service station price ex-tax was reduced from the 14.5c level of May 1937 to 13c on December 24, 1937.

The improvement in underlying conditions of demand and supply for gasoline was shown in a strengthening of Chicago Group 3 prices in the early months of 1938; the company increased its posted state-wide service station price 0.5c on April 3, 1938. This increase held until Sept. 26 when local competition revealed that the company's price was at an unsound, high level. Service station and dealer prices were therefore reduced 0.5c. There was weakness in Group 3 prices also. Group 3 prices continued down reaching an average monthly low of 4c in December. This was the lowest average monthly price for the period 1937-1947.

Skipping the period from the fall of 1938 to the spring of 1939 so as to discuss it in detail in the next section (which will be published in NPN next week) let us continue the comparison thereafter. By October 1939 Group 3 prices had returned to within 20 points of the average for the year 1938; the company cancelled its spring price reduction. Group 3 levels of late 1939 did not hold into 1940; on Jan. 27, 1940, the company reduced its two posted prices 0.5c. Despite further declines in Group 3 prices, the company did not change its posted prices until May 6, 1941, when the price of crude oil advanced; Group 3 prices advanced to an average of 6c a gallon. The story of price wars in Ohio cities in 1939, 1940, and the spring of 1941 indicates, as we shall see later, that the low-price gasoline shown in the Group 3 barometer of general market conditions got into Ohio and had its effect, even though state-wide prices were not always promptly reduced.

Dobbin Revolts as Oil Progresses

Up in Maine recently there was a brief revolt against progress. It may go down in history—in Fairfield, Maine, at least—as "Dobbin's Last Stand." Two horses were put to flight while pulling a drag through a wooded section. Whether they were frightened by a truck, tractor or some other modern conveyance born of oil's advancement, is not clear. But the team took off and shortly thereafter Robert Jenney's Sun Oil station was invaded and the herbivorous duo scored a temporary victory. Casualties included two scuttled gasoline pumps and a very startled and upset station proprietor. But the revolt was short-lived. At last reports the equine marauders were confined to pasture while a tractor took over whatever job the horses had been doing

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Oil Industry Should De-Emphasize Heating Oil Sales and Encourage Gas, API Told

R. H. Hargrove, president, Texas Eastern Transmission Corp., addressing a production meeting of API in Chicago, Nov. 9, declares "that the oil industry should begin gradually and yet definitely to de-emphasize the household and commercial heating aspects of their marketing, and should further encourage and aid the natural gas industry to secure the necessary steel and equipment to assume some of the burden of supplying the demands which the oil industry will discourage. . . I would say that it is to the best interest of the national economy for the oil industry to yield to the gas and coal industries some of its house and commercial heating markets . . ."

This approach to meeting future heating demands and the reasoning which leads to such a conclusion seem certain to arouse discussion, particularly in the oil marketing branch of the industry. Because of this, NPN publishes herewith the text of Mr. Hargrove's paper.

On preprints of Mr. Hargrove's paper, API printed this note: "The statements and opinions expressed herein are those of the author and should not be construed as an official action of the Institute."

By R. H. HARGROVE
President
Texas Eastern Transmission Corp.

A discussion of the importance of natural gas in our national economy actually resolves itself ultimately into a consideration of its importance and future in relation to the petroleum industry and the coal industry. This is true because these three industries—oil, coal, and natural gas—as a group furnish the prime moving forces which supply our economy today with more than 90% of all of the commercial energy consumed in the United States.[1a]

Mr. Hargrove

As a group, therefore, these mineral fuels are of basic importance to our economy, inasmuch as they provide the very foundation and source of the tremendous productive capacity of which evidence abounds in this country, and which is responsible for the highest standard of living the world has ever known. Economists have highlighted the relationship of energy to production by pointing out, on the basis of assembled statistical data, that in the past century the ratio of total energy output to national income, measured in comparable dollars, has remained comparatively constant; i.e., both have increased some 29 times.[2] As income rose, so rose energy consumption. Thus, as new technological advances were made, as new industries were founded, and as new sources of income developed, the energy industries have been called upon to furnish the necessary increases in prime moving force to power our economy.

This demand upon energy reached a wartime peak in 1944, when the fuel industries and water power produced more than 33½ trillion Btu's of energy to arm and equip our military forces and to maintain the civilian economy. After the wartime peak demand for energy in 1944, a decline from that peak set in which showed a successively lesser demand for 1945 and 1946. Last year, however, with civilian production rising, energy consumption jumped 10%, to a new all-time peak of more than 35½ trillion Btu's.[3] With the mounting tempo of increased civilian production becoming louder every day, I believe we may draw a parallel from the situation after World War I, and assume that some years hence we shall see both wartime peak of 1944 and the peak of 1947 as mere stepping stones to further peacetime highs in energy demand.

We must also, unfortunately, take into account the effect which rearmament on a large scale or, still worse, another war would have upon fuel demands. What seemed to us like a very mechanized and fuel-consuming conflict the last time might seem of pigmy size should we find ourselves engaged in a struggle where jet propulsion and atomic power would be important factors. Who can foretell the heights to which fuel consumption and demand might rise in such an emergency? We can only say that they assuredly would exeed anything the world has known thus far.

The fuel industries were confronted with a tremendous task during the past war. That they realized their responsibility and discharged it admirably can be ascertained by the record and results. But it was not an easy nor a simple matter to increase our energy output 50% in the short space of 6 years, i.e., from a total of 21 trillion Btu's in 1938 to more than 33 trillion in 1944.[4] It was a job which required the concerted efforts and co-operation of all three industries, and of the individual companies and persons in the industries.

The Co-operative Position

There is a lesson here to be learned from the past and applied to the future. What was accomplished in war by co-operation and concerted effort can only be accomplished in peacetime and in any future war by the same means. To serve adequately, we must serve co-operatively.

A farsighted view of the fuel industries' responsibilities must acknowledge that they, as public servants, have the duty and responsibility not only of supplying the peacetime demands of our nation for energy, but of supplying them in such a way that the industries may hold themselves ready to fulfill their part in national defense should the need arise.

What does that mean in terms of practical action today?

It means that, as a group, the fuel industries should co-operate to plan their marketing, production, and processing to supply the public demand for energy and yet maintain a position which will not be too vitally disrupted by the impact of war. It means that the industries' views and approaches must be sufficiently broad to encourage the joint serving of markets heretofore more or less exclusively served by one industry; so that, should peak demands skyrocket, either through increased civilian or military production, the combined facilities of the fuel industries may be adequate to the need, rather than find a single industry unable to cope

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with the demand. It may mean the withdrawal from or de-emphasis of some types of markets by one industry in favor of another industry; it may mean the sharing of markets in open competition.

Relatively Speaking

Let us then have a look at the relative competitive positions of these three industries—oil, coal, and gas—and then see what it will mean to each to co-operate in a joint effort to fulfill their responsibilities to the national economy.

In looking at the competitive positions of the fuel industries, we must first of all realize that they are competitive only in certain fields and only in certain localities. The absence of competition in some instances is due either to technical advantages of one fuel over another or to economic advantages of price or geography, or both.

The oil industry enjoys monopolies of the technical nature to a greater extent than the other two fuels. Thus there is no real competitor to the oil industry in the field of highly mobile energy, such as the gasoline, kerosine, and fuel oils which power our millions of automobiles, our airplanes, trucks, tractors, and all the mechanized panoply of war. Also, in the field of water and railroad transportation, oil is proving its greater efficiency as a diesel fuel—and evidence of its displacement of the old oil-steam and coal-steam engines abounds. Particularly on western railroads, where long hauls at high speeds are routine, is its use in the diesel-electric combination increasingly apparent.

In none of these fields is natural gas a competitor. No practical method of mobilizing natural gas has yet been developed which would permit its use in providing the energy requirements of the transportation industries. These fields are technically the property of the oil and coal industries (and more and more the oil industry rather than coal), and there is no indication now that there will ever be competition from the natural gas industry in this respect.

Another aspect of the immobile character of natural gas is its incapacity to be transported by any means other than by costly pipe-line operations. Coal may be shipped from point to point by railroad car, ship, or truck; and oil may employ any of these three means in addition to the pipe lines as used by gas. This aspect has several repercussions on our thinking about inter-fuel relations.

Inter-fuel Relations

In the first place, because natural gas may be transmitted only by pipe line, a considerable expense is required for it to enter into a new territory if it is at any considerable distance from the source of supply. A corollary is that natural gas, in a peacetime economy, will not, therefore, enter competition in a distant area unless it has a definite price or convenience advantage over the competing fuels.

Furthermore, because of the inflexibility in the marketing of natural gas, it is more difficult for this industry to adjust its operations to satisfy war-born demands than it is for either oil or coal, which may take on additional customers, or change from one to the other, simply by changing the destinations of their trucks, railroad cars, or ships. Moreover, natural gas, not being a seagoing fuel as are both coal and oil, must be ruled out completely as a source of energy for overseas consumption, either by our armed services or in regular export channels.

The inflexibility and immobility of natural gas, therefore, restrict its use, both in war and peace, to a home-front role. It cannot contribute to the changed economy of national emergency and war the elements of mobility which coal and oil can, nor can it be used in peace as an instrument of policy to supply needed energy to friendly countries or to exchange for necessary imports.

These, then, are fields in which natural gas cannot compete with oil or coal for technical reasons. There are, reciprocally, situations in which neither coal nor oil can compete with natural gas. Such situations however, are for the most part economic in nature rather than technical.

As a matter of fact, I know of but two industries in which the exclusion of competition to natural gas is due to technical rather than economic factors. One of those industries is carbon-black manufacture, in which gas is the only satisfactory raw material. The other is the chemical industry in various of its fields in which natural gas is used either as a catalytic or principal element in manufacture.

Geographically Speaking

Economically, natural gas enjoys a geographic monopoly in those sections of the country where natural gas is abundant. In the Southwest, and in California, the greater convenience and cheaper price of gas as against either coal or petroleum products have led to its almost universal acceptance as the source of heat and power in those regions. Until supplies of natural gas become exhausted to the point that prices reflect their scarcity, therefore, coal and oil cannot compete with gas for the heat and power loads in those areas. Inasmuch as the time of the exhaustion of our natural-gas supply seems quite far off indeed, we can forget that contingency as a practical matter now.

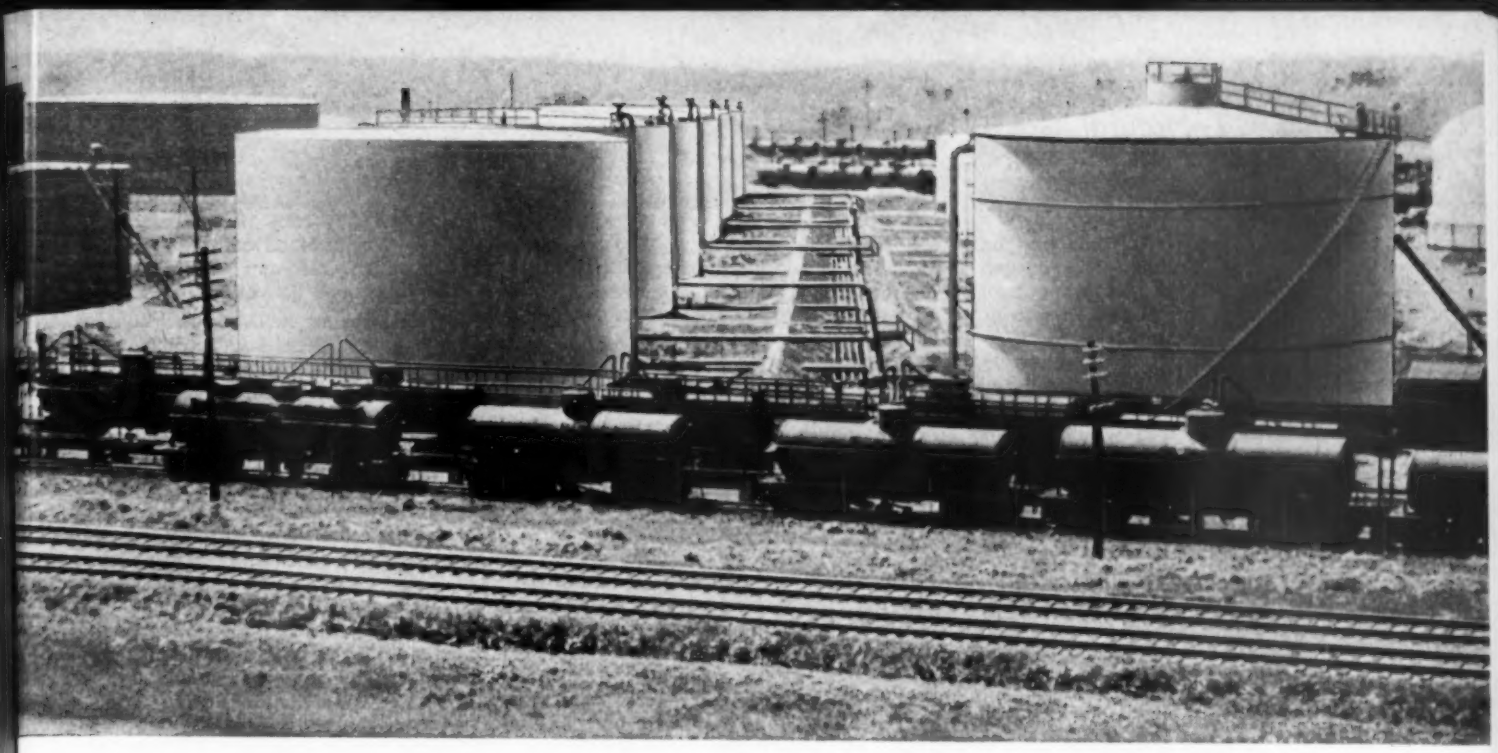
May I say a word in passing about this "time of exhaustion" of our oil and gas supplies. We are used to hearing on occasion that "we have enough gas to last us only 30 more years"; or "we have enough oil to last only 12 years." Such statements, being based upon the ratio of proved recoverable reserves against the annual production, lead to misunderstanding on the part of the public, which too often does not take into account the ever-growing search for more reserves. Actually, new discoveries each year tend to increase the ratio of reserves to production, rather than diminish it. I imagine that, in 1926, when they said the gas industry had enough gas to last only 19 years, the public expected to have no more after 1945, instead of being told, in 1945, that there was gas enough for 29 more years. I wonder how much more gas they will say we have in 1975?[5]

The Competitive Position

Well, we have looked at the marketing areas where there is no competition as between natural gas and the other two fuel industries. There are, however, areas where both technical and economic considerations permit the open competition of all three, and it is to those areas the we must direct our attention if we are to seek co-operation among the industries. So, for instance, in our great industrial heart, in the Appalachian and Eastern Seaboard areas, we find all three —natural gas, petroleum, and coal —serving identical markets side by side. Houses are heated by oil furnaces, coal furnaces, or natural-gas furnaces. Steel industries, glass industries, manufacturers of practically all kinds, can use either of the three fuels. Hotels and office buildings are sometimes equipped with alternate systems for heating.

In open competition, one could reasonably expect to find the positions of the various fuels determined by free operating economic law, so that the most efficient and convenient fuel would be selling for the highest price, and those of lower quality for a lower price. Consumers who could afford to pay a premium would buy the best fuel; those who could not afford that premium would buy the cheaper. Thus sales would balance out; demand would be distributed among the various fuels. As in the automobile industry, some would buy Chevrolets, some would buy Buicks.

But consider what would happen to supply and demand in General Motors if Buicks sold for less than Chevrolets. The result would be equivalent to what is happening to fuel demand in Appalachian and Eastern Seaboard areas—everyone would want to buy a Buick, just as everyone in these areas wants to buy gas—because gas,



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as the premium fuel, is selling at a bargain.

There is no need to belabor the point of the basic superiority of gas as a fuel. We and the other fuel industries must recognize and accept the factors of cleanliness, effortlessness, and efficiency which make it more desirable for heating, power, or industrial purposes than either oil or coal. The only factors which would restrict its use as against the other two fuels are availability and price. And recently the trend of fuel prices has been such that it encourages rather than discourages the choice of gas. As coal and oil prices have risen steadily (coal 63%, fuel oils 50% more in 1947 than the average of 1935-39) natural-gas prices have decreased (natural gas in 1947 sold on a national average at 9.9% less than the 1935-39 average). Average retail prices for 1947, per million Btu's showed natural gas selling at 59.2 cts, bituminous coal at 53.1 cts, and anthracite at 68.8 cts. Corresponding prices for fuel oils are not available, but an index over 1935-39 prices, as mentioned previously, indicates a 50% increase.[6] We must take into account, on price figures such as these on a Btu equivalent, that the factor of the efficiency of the appliance used to generate the heat is not considered. Therefore, a pound of bituminous coal is rated at 13,200 Btu per pound; but, if it is burned in a hand-fired hot-air home furnace, it may only generate 45% of its potential heat. Compared to an automatic gas furnace of 84% efficiency, the disparity would have a considerable price effect. In such a case, for instance, giving effect to the efficiency factor, the national average price for natural gas would be 70.5 cts per million Btu's, and that of coal $1.179 per million Btu's. The hot-air home furnace is an extreme instance of efficiency disparity, but it can be generally said that natural-gas appliances are usually far more efficient than coal-burning appliances.[7] It is thus apparent that even the Btu equivalent prices do not give us a true comparison of the cost to heat by natural gas or by coal.

Discusses Price Trend

These price figures are national averages, of course. Geographical factors will affect them considerably, as we have observed. But even in areas such as the Appalachian, where the bulk of the natural gas must be transported from the Southwest, and where coal is more or less on its own home ground, the trend is to make the premium fuel, natural gas, sell at a bargain price.

In Pittsburgh, for instance, the Btu equivalent prices of coal and gas, on a 100% efficiency basis, showed this trend in the past year: The average of the 4 quarters of 1947 indicated bituminous coal selling for 32.9 cts per million Btu; gas at 48.5 cts. By May 15, 1948, the difference between the two had dropped, so that coal was costing 38.3 cts per million Btu's, and gas still only 48.5 cts per million Btu's.[8]

In Cincinnati the trend was similar. Coal, which cost 41.0 cts per million Btu's in 1947, cost 58.3 cts in May 1948; and gas, which sold for 8.1 cts per million more than coal in 1947, sold for 55.7 cts in May 1948—2.6 cts per million Btu's cheaper than coal.[8]

Naturally, the demand for natural gas has skyrocketed. Pipe-line capacity presently can satisfy only a small part of the potential demand. Each application with the Federal Power Commission for a certificate to increase pipe-line capacity brings a flood of interventions from companies seeking additional supplies of gas. It will probably be years before the gas industry can meet the demand in the Appalachian area alone, much less in the whole eastern area.

I mentioned previously that, if the three fuels were to engage in free competition, the factors of supply and demand would soon balance out through the operation of price levels. So, as demand for natural gas outstripped the available supply, the price of natural gas would rise until demand leveled off to the supply. Increased prices on the marketing end would eventually, of course, be translated back to the producers and landowners who held the sources of supply.

This logical economic development of the natural-gas market, however, cannot come about because it does not operate in a free competition, but rather in an environment which regulates and restricts natural-gas prices without affecting either coal or oil prices. So it is that we can see the frustration of the economic law and the consequent runaway demand for natural gas.

Although it does not have the incentive to demand which rate regulation affords natural gas, oil, nevertheless, apppears to be in a competitive situation somewhat similar to that of gas. For convenience and efficiency, it is superior to coal and, although it does not have the relative price advantage which gas has, it is still increasing rapidly in popularity as a household, commercial, and industrial heat producer. Also increased demands for gas in manufactured-gas areas reflect in increased demands for the oil used to enrich such gas. As a result we find, from Bureau of Mines estimates for 1948, that gas oil and distillate fuel-oil demand is up 101.6%; kerosine demand up 69.2%; and residual fuel oils up 34.9% from 1941 levels.[9] All of these forms of oil compete to some extent with gas and coal in areas where all three are available.

In the broader field of the whole oil industry, last year saw total demand for petroleum exceed total supply by 5,033,000 bbl., a deficit of only about ¼ of 1%—but a deficit, nevertheless. Estimated demand and supply for 1948 indicate a surplus of 34,800,000 bbl. over demand, or an excess of approximately 1.5%.[10] And this excess will be obtained only by operating every facility at maximum level, by using every piece of transportation equipment to the fullest extent, by operating refineries as they were during the first half of this year, when East Coast refineries operated at 110.7% of rated capacity, Texas Gulf Coast refineries at 102.7%, and Louisiana Gulf Coast at 115.6%.

Operating thus to barely meet today's peacetime demands, what would the petroleum industry's position be should war superimpose its enormous demands? The necessity for looking at that responsibility is of basic importance to the oil industry today.

What About Coal?

The competitive position of coal shows the other side of the oil and gas picture. Contrary to the trends of both of those industries, the coal demand has remained fairly constant, or even dropped off slightly. In 1926 approximately 532.5 million tons of bituminous coal and lignite were consumed. Twenty years later, in 1946, approximately 490 million tons were consumed. In the intervening years demand fluctuated up and down, but for the most part was lower than these figures.[11]

The picture for coal is even less bright when consumption is studied from the point of view of the percentage of total energy contributed. In 1926 coal was responsible for approximately 67% of all energy produced in the United States from water power and the mineral fuels. Petroleum contributed approximately 12%, and natural gas approximately 6%. But in 1946 coal's contribution amounted to only about 42%, whereas petroleum had increased its share to 30%, and natural gas to about 12½%.[12]

The conclusion is obvious. Technological advances have not brought the convenience and efficiency of coal up to the point where it can compare with either oil or gas. And yet, despite this lack of technological improvement, prices of coal have in the past few years risen precipitously. A ton of bituminous coal, which cost $9.94 at retail in 1943, cost $14.02 in 1947. A ton of anthracite, which cost $13.20 in 1943, cost $17.48 in 1947.

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Prices 20 years ago were about the same as 1943 prices.[13]

Coal is losing its share of the market because, instead of being able to cut prices in the face of superior competing fuels, it has raised them.

To Satisfy Future Demand

If the considerations which I have heretofore endeavored to present are valid in their picture of the economic and competitive positions of oil, coal, and gas, we can proceed to draw some conclusions as to the logical future steps to be taken by each to satisfy the nation's demands for energy in the years to come. In this regard, we must bear in mind always the extraordinary demands which war would make on our three fuel industries.

To look at the coal industry first, I think that its duty to the national economy coincides with its own purely selfish interests, because I would say that it ought to aim toward recapturing a part of the percentage of the fuel market which it has been losing steadily over the past 20-odd years. But I think the industry should realize that the only effective way, in the long run, of recapturing part of that market is to put its fuel on a truly competitive basis; i.e., either by increasing its efficiency and convenience, or by gaining a price differential sufficient to overcome its disadvantages, or by a combination of both of these methods.

These methods of meeting competition would prove, I believe, much more efficacious in the long run than the coal industry's present attempts to restrict the progressive expansion of natural gas by appeals to governmental regulatory bodies. For as long as we have the situation we have described, viz., of a premium fuel selling at a bargain rate, we shall have a demand for that fuel. Indeed, government regulation has helped to build up the demand; it can hardly be asked now to refuse to permit it to be served.

The view that coal would do better to turn its efforts to research and technological improvements is shared by some elements of the coal industry itself, as is reflected by an industry publication of September, 1946, which stated that, "as long as coal is marketed and burned in the style of a quarter century ago, natural gas will keep on winning more home owners away from coal."[14]

In keeping with the sentiments of this opinion, the coal industry is, in fact, engaging in a program to enlarge and expand its research and development facilities. I believe that these efforts to keep from wasting our coal resources by finding more efficient and convenient ways of utilizing them are to be applauded as be-

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ing in the interest of the national economy.

I myself am unable to comment on the ways in which the technological advancement of the coal industry may be brought about. But I can comment to some extent on ways to regain the price advantage which the coal industry once enjoyed, and which it has lost in spiraling ascent of coal prices as contrasted with the decline of gas rates.

There are two ways in which the price differential could be regained. One would be to cut production, processing, and transportation costs enough to enable the price to the ultimate consumer to be cut. In today's trends of rising costs—of labor, materials, and transportation—such a procedure would be well-nigh impossible unless there would occur a general reversal of the price trend, or unless startling new technological improvements in production methods should be discovered.

And What About Rate Fixing?

The other way to regain the price differential is to allow natural gas, as the competing fuel, to seek its natural price level in open competition. Obviously, this cannot come about either, unless there be a change in the rate-fixing bases of the governmental regulatory bodies — which are, as we have seen, responsible for the most part for the restraints on the price of natural gas. Such a change in thinking on rate bases to give effect to the competitive position of natural gas is not, as a matter of fact, as remote a possibility as might at first be thought. Consider, for instance, the language of the staff report in the Federal Power Commission Docket G-580 (natural-gas investigation) which stated:

"Neither they [the regulatory agencies] nor the regulated companies can overlook the results of rates in stimulating demands for natural gas as related to the capacity of transportation and distribution facilities for providing service. . . . The present situation points to the desirability of flexibility in rate making and a sufficiently broad view of the factors upon which they are based. When, as now, the potential demands for natural gas in many markets have so greatly outrun the capacity of the transporting and distributing companies to supply them, it is indicated that—viewing broadly the interest of consumers—the reasonableness of rates cannot be regarded apart from the character and dependability of the service which is or can be provided."[15]

Is it too bold a paraphrase of these sentiments to say that the public interest may soon require adjustments of natural-gas prices to reflect the competitive position?

I maintain, then, that it is to the advantage of the oil and coal industries alike, as competitors of natural gas, as well as to the ultimate interests of the national economy, to support this view and seek to secure recognition in rate making for the premium nature of natural gas in fuel competition.

This consideration, embodying as it does a joint aim of the oil and coal industries, provides a logical beginning for a consideration of the future policies of the petroleum industry which would contribute most toward the aim of the fuel industries to serve adequately tomorrow's demand for energy.

The Future of Consumers

We have seen how the petroleum industry is operating today at more than rated capacity to supply the national demand for oil and petroleum products. We have pointed to the responsibility of the oil industry to plan for the future with an eye to the demands of war, should it come. Let us look at the consequences to oil consumers if that unwanted situation should step upon the scene today.

In the first place, we would be faced almost immediately with the rationing of gasoline for civilian uses. We saw enough of that during the last conflict to realize the restriction on our economy which would result. And yet we may forecast that the consumption of fuel in a future war would so dwarf by comparison the previous consumption that the restrictions on civilian use would be considerably more intensified. With the tremendous strides in aviation design have come concurrent tremendous increases in the amount of fuel consumed. Further development toward supersonic speeds and superblockbuster loads will increase that consumption still further.

And one feature of new aircraft design is particularly noteworthy here in relation to fuel supply. That feature is the development of jet propulsion in aircraft engines, and the consequent use of kerosine as the fuel for these enignes. As all of you are, I am sure, well aware, the extravagant use of fuel by jet-propulsion engines is one of the chief problems obstructing their further development. Future design improvements may help the situation, but presently that fuel demand is a fact we have to face.

If war should come, where would we get the kerosine to power the jet planes which would start rolling off assembly lines in ever-increasing numbers?

For one thing, we would increase the percentage of kerosine refined per barrel of crude oil. That would mean taking some percentage from the products immediately below and above kerosine on the cracking scale —some from gasoline and some from the heating and fuel oils. Inasmuch as gasoline would also be in great demand, the greater burden of this refining shift would be on the heating and fuel oils. Such a shift would, therefore, reduce considerably the amount of heating and fuel oils available for civilian consumption. This reduction, together with the almost complete removal of kerosine (itself a heating oil) from the civilian scene, would present us with a rationing of those fuel oils that would make our recent experiences in those respects seem minor by comparison.

Start Now

We can forestall that contingency to a considerable extent by beginning far enough in advance to plan the co-operative assumption of those heating burdens by the natural-gas and coal industries.

I mean by that that the oil industry should begin gradually and yet definitely to de-emphasize the household and commercial heating aspects of their marketing, and should further encourage and aid the natural-gas industry to secure the necessary steel and equipment to assume some of the burden of supplying the demands which the oil industry will discourage. It is a process which cannot be completed overnight. We have already seen that the gas industry's demand far outstrips the capacity of transportation facilities today. Obviously, then, we cannot immediately assume an additional heating burden from the oil industry. Nor would the economic interests of the oil industry be served by shifting that responsibility immediately. It is a process of years — a gradual, progressive shifting of service. But that is precisely the point I should like to make. If it is not an overnight process now, it will likewise not be an overnight process 5 years from now or 10 years from now. In order to bring it about 5 or 10 years from now, we must start it now.

The idea of a shift of emphasis in the marketing of the oil industry so as to de-emphasize service of markets capable of being served as well or better by natural gas in favor of the emphasis of markets exclusively the responsibility of the oil industry, as the transportation needs and military demands, is not a new idea or one original with myself.

Indeed, the petroleum industry has already recognized the interrelation of interests of our two industries by its having included the anticipated requirements of natural-gas transmis-

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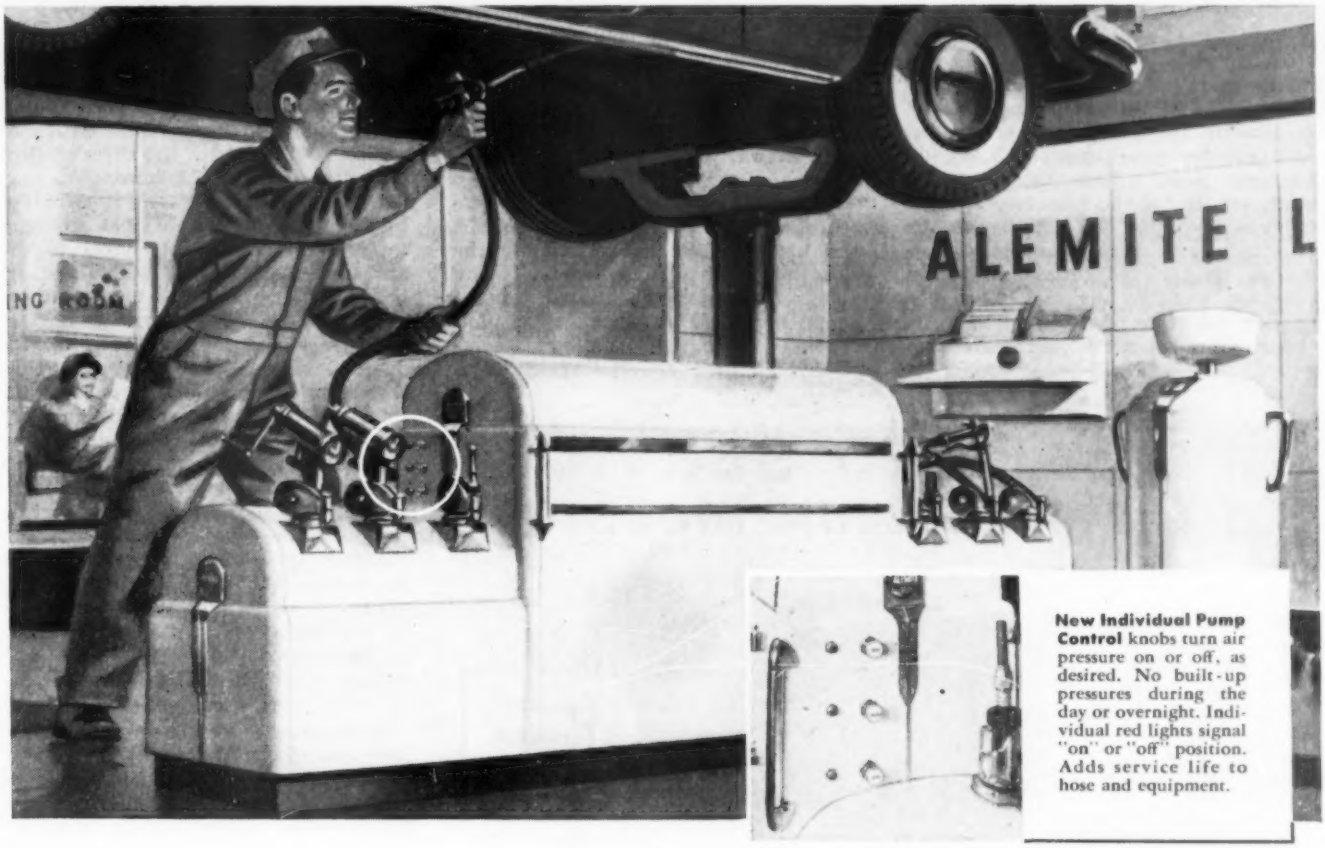

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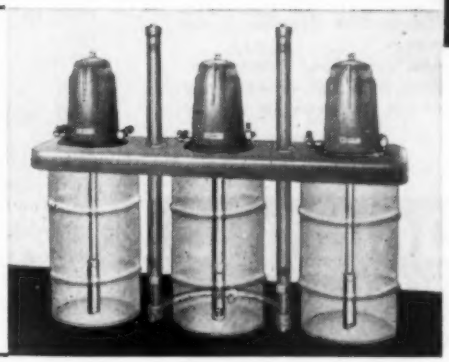

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sion companies in the report of the National Petroleum Council's Committee on Petroleum-Industry Steel Requirements. This report, presented to the Wolverton committee conducting the fuel investigation, showed a demand for steel for natural-gas transmission pipe lines of 1,461,400 tons per year.[16] Thus, informed and acute leaders of the petroleum industry can see that the futures of our two industries should be linked together in the marketing phase as they are economically and physically in the production phase.

I would not, however, advocate that substantial portions of the energy demand be shifted from one industry to another only to hold the fuel industry prepared for war, even though that be the chief consideration. I believe that the trends of petroleum demand in the future will be such that, even if we be blessed with peace for many years to come, the need will become greater and greater percentagewise for the distillate fuel oils and kerosine, so that ultimately the situation which war would bring about overnight would be brought about by years of peace. Mr. Wolverton's committee has even commented upon our change from a "gasoline" to a "distillate" economy.[17] If such is the case, it is still sound long-range planning, war or peace, to let natural gas assume the burden it is technically suited to assume, and to let petroleum concentrate on those imposing markets of the future which only it is capable of serving.

Thus I would say that it is to the best interest of the national economy for the oil industry to yield to the gas and coal industries some of its house and commercial heating markets, its manufactured-gas-enrichment markets, and some of its industrial markets; and, further, that it serves the national economic interests for the natural-gas industry to build up a stable, dependable, and adequate supply and transmission system to assume those markets in addition to those it already serves; and that the cooperation of the oil industry in aiding the gas industry to secure the steel and materials necessary to build up its system thusly, and encouraging it to do so, is to be applauded as to the past and sought after as to the future.

In Conclusion

In summary, let me say that I believe the next few years will see new peaks in energy demand and consumption. I hope most sincerely that those peaks will represent increased civilian production to maintain or raise our presently unequaled standard of living. I fear that those peaks of demand may be representative of the armaments of war being readied against the threat of another terrible conflict. But whatever they may be, whether of peace or war, the fuel industries must not be found wanting in their capacity to serve. We must plan now for those peaks; we must cooperate; we must accept the responsibility.

I have attempted to outline the part natural gas can play in assuming that responsibility. By reason of its qualities and advantages as a household, commercial, and industrial fuel, and by reason of its disadvantages and incapabilities as a mobile and overseas fuel, we have seen that its logical future is to assume more and more the responsibility of supplying those "home-front" uses (perhaps the most essential of all uses) to which it is so well suited, and to leave to the other fuels the direct and dramatic roles of war.

The responsibilities of the whole fuel industry can be met adequately and timely only through the determined co-operation and joint efforts of its three components. I firmly believe that that co-operation can be achieved within the traditional free enterprise framework of our national economy, without the necessity of any additional governmental regulation, either by new agencies or increased powers of present agencies. I also believe, however, that that co-opera-

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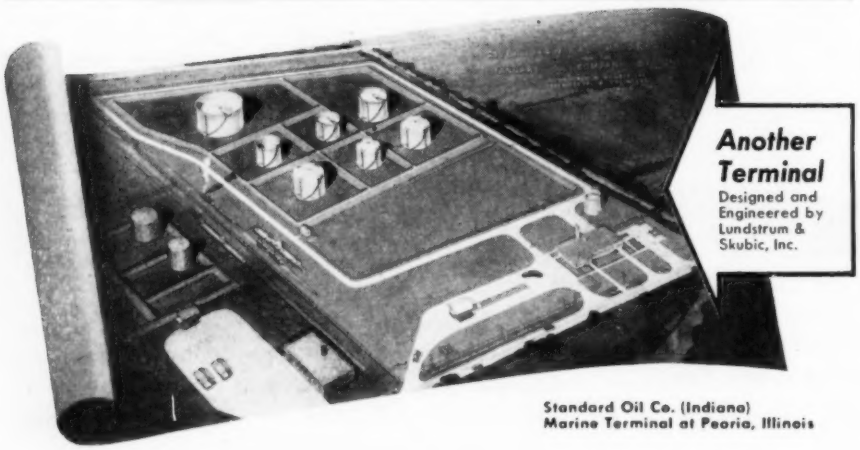

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tion must begin now in order to be ready for the demands which will be upon us tomorrow.

(National Petroleum News welcomes comments from readers on Mr. Hargrove's papers.)

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Taft-Hartley Act, Directory Of Oil are Topics of Books

Operating Under The Taft-Hartley Act, by Max Malin and S. H. Unterberger; Labor Relations Information Bureau, Standard Oil Bldg., Washington 1, D. C.; 8½ x 11 in., 58 pages, paper-bound, $2.

In explaining the impact of the Taft-Hartley Act on everyday labor situations, the authors have employed a functional topic arrangement whereby all points related to one topic are pulled together, no matter where they are found—in the T-H Act, regulations of the NLRB or other governmental agencies, court decisions, or in legislative materials. This method, authors state, eliminates confusion resulting from section by section study of the act in view of the fact that certain important topics are mentioned at various places in the text.

Integrated in the text of the new edition are the results of administrative and judicial decisions rendered since the T-H Act was passed. An additional chapter provides a summary of the trend of federal labor legislation, including the description of the types of proposals which the next Congress will face. The complete text of the Labor-Management Relations Act of 1947, which is printed at the end of the book, is cross-referenced with respect to the text of the book itself.

* * *

Oil and Petroleum Year Book, 1948, by Walter E. Skinner; 5½ x 8½ in., 236 pages, stiff cloth binding, indexed, $4.

This is the 39th annual publication of particulars on 660 American and foreign oil companies—covering all branches of the industry. Data includes: names of directors and other officials, operating locations, description of business, crude oil production, refinery runs, and financial summary.

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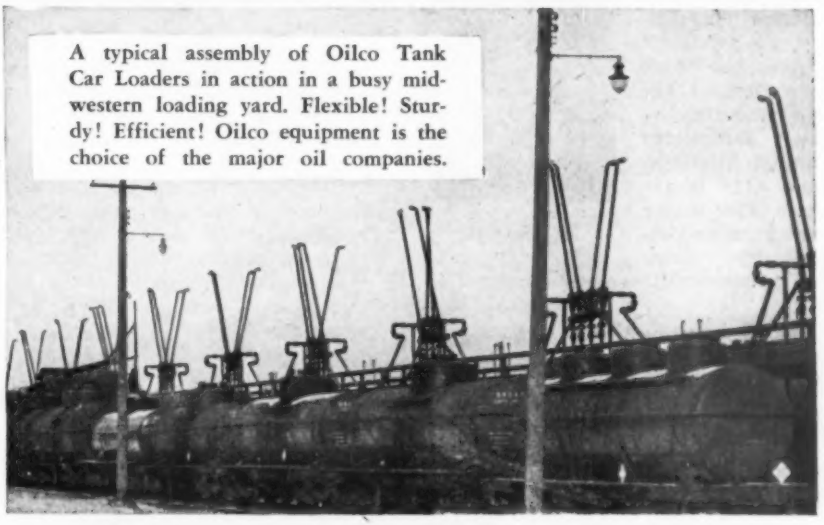

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Avoiding Contamination in Oil Products

By J. W. SINCLAIR*
Automotive Manager
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From the moment crude oil comes from the well, to the time delivery is made of the product to the consumer, there is a constant effort by industry to avoid contamination and intermixture. As the degree of product refinement increases, vigilance increases. The closer the product approaches the consumer, the more extensive the safeguards against intermixture. It is in these later stages that greater complications occur and opportunities for correction lessen.

Mr. Sinclair

In the ensuing discussion we restrict ourselves to these later stages. We further confine ourselves not to intermixtures in marketing operations as a whole, but more specifically to those encountered in the final stage of handling—which is preponderantly by tank vehicle.

In these final stages, public and industrial concern may be divided into two major categories:

a. Delivery of the quality of product intended.
b. Delivery of a product no more flammable than intended.

(Parenthetically, it is mentioned that another consideration also enters, viz., the delivery of the quantity of product intended. As our discussion confines itself largely to the hazardous or otherwise undesirable potentialities of intermixture, this third consideration is mentioned only in passing. However, efforts to effect physical safeguards against lessened quality and to avoid greater flammability may be, and frequently are, made more difficult by meters, air eliminators, and other calibrating mediums.)

Product-Quality Considerations

Delivery of the quality of product intended (disregarding for the moment the increased flammability factor) is a matter of concern primarily with respect to:

a. The commercial aspects of contamination, on the premise that extraordinary care in the handling of products is a matter of good business. (For example, off-standard kerosine may result in smoking lamps; off-standard diesel oil may result in detonating motors; off-standard burner oil may result in lessened heating units, etc.)

b. Compliance with business codes pertaining to the quality of the product sold.

These "quality" considerations have preponderantly to do with possible debasement of the product through contamination, and the hazard factor does not enter. Any step taken to avoid delivery of a product of greater flammability than intended is generally adequate as to avoidance of debasement. Procedures, equipment standards, and delivery practices within the industry are relatively similar in both cases. However, in the field of government regulations a somewhat different condition is encountered. Those agencies having jurisdiction over maintenance of product quality have no jurisdiction in the field of operating safety, and vice versa. Although their respective objectives differ, their requirements have considerable in common. As our discussion has primarily to do with the hazard factor, these "quality" considerations are mentioned for the purpose of emphasizing that all procedures calculated to avoid hazards which result from intermixture must also give consideration to the anti-debasement requirements of regulatory or legislative bodies.

Hazardous Potentialities

The hazardous potentialities of inadvertent intermixture of products in such a degree as materially to increase their flash point have long been recognized by industry. In this respect we are dealing not merely with possible commercial penalties resulting from product debasement, but also with possible large property losses and, conceivably, the loss of limb or life. The results of intermixtures of this character may be experienced after the product has left the possession of the vendor and is completely out of his control. In addition, the hazard may not culminate immediately after delivery, but may be delayed hours, or even days, after the intermix occurs.

Please especially note in the foregoing that there is used the phrase "intermixture of products in such a degree as materially to increase their flash point." This carries with it the inference that in some degree intermixture may be tolerated and yet avoid hazardous potentialities. The inference is intentional in its application to products deliveries by tank vehicle. In considering the hazards resulting from intermixture, it is well to recognize the physical impossibility of completely avoiding, during the delivery process, all contamination of any degree whatsoever.

Granting this necessary and practical premise, the next step is to identify within practical working limits the extent of contamination permissible and yet to avoid hazardous consequences in the end use of the products. To expedite our discussion, no attempt is made to do so for the entire range of petroleum products, but only for those products most frequently carried in bulk by petroleum tank vehicles, viz., gasoline, cleaning solvent, kerosine, stove oil, and diesel fuel. Also for our immediate purpose, we group these products into two major classes as established by *API Standards* 1001:

Class "A"—embracing those flammable liquids having a flash point below 70° F.

Class "B"—embracing those flammable liquids having a flash point from 70 to 187° F, inclusive.

Although contamination between the several products falling within class "B" is sometimes a matter of concern, the major result of intermixture is not of a hazardous nature and, more frequently than otherwise, results merely in product debasement. The major concern rests with intermixture of classes "A" and "B" products, and more especially the avoidance of undue dilution of class "B" products with class "A" products. In this respect, tests have been made to determine the quantity of gasoline contamination that may be tolerated by typical flash-point diesel oil, stove oil, kerosine, and cleaning solvent, without going below the specification flash points. Blends were made using gasoline and the various products named, so that the flash points bracketed the minimum specification. Cleaning-solvent contamination of diesel oil and kerosine, and kerosine contamination of stove oil, were also made to complete the range. These tests indicated the following:

a. To reduce a 176°F flash-point diesel oil to the specification minimum of 150° F requires 0.6% gasoline, or 14% of cleaning solvent, or 60% of kerosine.

b. To reduce stove oil of 139° F flash point to 120° F flash point requires 0.75% gasoline.

c. Kerosine of 138° F flash

*Paper presented to Group Session on Accident Prevention, "Safe Handling of Petroleum Products," at 28th annual meeting of API Nov. 8.

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point requires 0.65% of gasoline, or 32% of cleaning solvent, to reduce the flash point to the specification minimum of 125° F.

d. Cleaning solvent of 110° F flash point tolerates 0.4% of gasoline before reaching the 105° F minimum.

There yet remains for consideration the extent of dilution which might occur when a container completely filled with vapor (but no liquid) from a class "A" product is filled with a class "B" product. In other words, what would be the influence on the flash point when a tank containing gasoline vapors is subsequently loaded with kerosine or cleaning solvent? Approximately 60 gals. of gasoline will vaporize to fill a 10,000-gal. tank car with gasoline vapors. Therefore, if all of the vaporized gasoline were absorbed into the product being loaded there would be 0.6% of gasoline, or sufficient to reduce the flash point considerably. However, the belief is expressed that the gasoline vapors are displaced by the loaded product to the extent that not more than 0.1% of gasoline would be absorbed. There is seemingly no reason why the same ratio of potential contamination should not be experienced on containers of considerably reduced capacity, such as truck tanks.

The foregoing is recited not for the purpose of advocating wide latitudes in procedures and standards but, rather, as a precautionary admonition to guard against any requirement, self-imposed or otherwise, which presupposes the practicability of complete avoidance of contamination; or which assumes that, if potential hazards are to be avoided, there must be 100% freedom from contamination.

Industrial Practice

We have hereinbefore indicated the concern of industry with respect to intermixture, and have attempted to outline in a general manner the extent of intermixtures which may result in later hazard. Let us now consider the developments in industry standards and procedures calculated to minimize these hazards.

These developments generate from industrial experience, and they find formal expression through two major channels, viz., intra-company procedures and practices, and industry codes and "recommended practices." Whether intra-company practices follow industrial codes, or whether industrial codes follow industrial practice, is somewhat in the nature of a "which comes first, the hen or the egg" conjecture. There seems no practical purpose in attempting to establish any precedence, for most certainly each is in a large measure dependent upon the other. However, one major differentiation should be recognized, viz., that once an industrial code is promulgated, it is recognized as being the best composite thinking of all companies and, as such, forms a sound basis for company and industrial planning.

Intra-company procedures and practices may, and frequently do, go much more into detail as to *method* of accomplishment than do industrial codes, as methods of accomplishment can be changed at will to suit localized conditions, and to take prompt advantage of improved design and technical developments in accomplishing the necessary end established by the industrial code. As opposed to the flexibility of intra-company procedures, the industrial code is relatively inflexible. Also it frequently forms the basis of legislative or regulatory enactments of public agencies, and what might be a very acceptable and adaptable procedure in one area, or within one company, may prove very burdensome and impractical if an attempt were made, either through industrial code or legislative enactment, to make such procedures universal. Because of these outstanding reasons, it is highly desirable that to the greatest possible extent our industrial codes confine themselves to establishment of the end to be accomplished and refrain from detailed dictums as to the manner of accomplishment. In further support of this thought, it is suggested that, if methods of accomplishment are detailedly indulged in by an industrial code, frequent revision is essential if obsolescence is to be avoided. Otherwise the code will tend to hinder progressive developments of techniques and appurtenances. Too frequent code change tends to undermine confidence in the stability of the code, and considerable of its stature is lost.

Jointly, for the purpose of indicating extent of recognition by industry of the potentialities of intermixture and for indicating the treatment accorded by industrial code, the following review may be pertinent.

1. The ideal situation is so to set up all distribution facilities as to permit of no possibility of any intermixture. This is obviously impractical, if not impossible, of accomplishment unless we go to the extreme of specifically restricting each container to one product, and one product only, during its entire period of usage. Even then we would not be reckoning with human frailties, because it is conceivable that the container might be filled with a product different from that which it has been assigned to carry.

2. In recognition of the impracticability of such procedure, the carrying of different products at different times in the same container is permitted, provided the container is first cleared of the product previously carried. Accordingly, *API Standard* 1001, 1946 edition, Sect. IV, Par. 4a, provides as follows:

> "In the event that a tank vehicle is used alternately for the transporting of class 'A' and class 'B' flammable liquids, no compartment of the tank on such vehicle which has, on the prior loading, contained class 'A' flammable liquid shall be loaded with class 'B' flammable liquid until such compartment and the piping and any accessory delivery equipment connected thereto have been flushed or otherwise cleared of class 'A' flammable liquid."

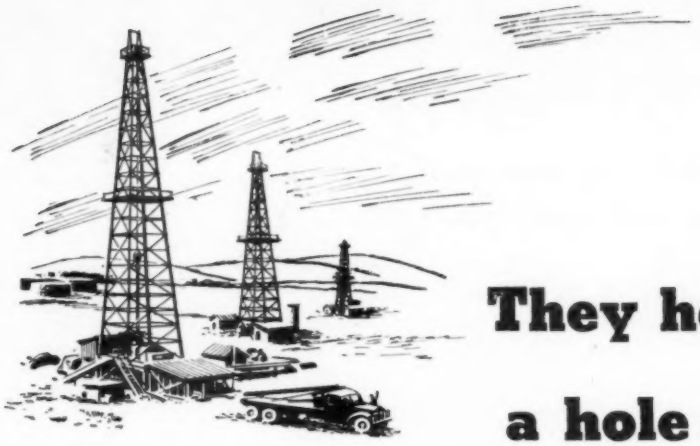
3. As the variety of products increased, the need of coincidentally carrying more than one product on a truck became apparent, and the multi-compartment vehicle tank became general in usage. The possibility of intermixture through leakage and tank heads is met with the provision that, when products of a different flash point are carried in the same tank, an air space equipped with drainage facilities must be provided between compartments. (See Sect. II, Par. 5b3, of *API Standard* 1001, 1946 edition.)

4. As the usage of multi-compartment tanks increased (as a means of product segregation rather than legislative necessity or otherwise) difficulties in flowline installations were encountered. The multiplicity of outlets taxed the limited space available for installation. The inevitable sequence was the use of manifolds. Herein arose another contamination threat, and the 1946 edition of *API Standard* 1001 accordingly provided under Sect. IV, Par. 4b, as follows:

> "In the event compartments of a vehicle tank are connected to a common outlet, no compartment so connected shall contain class 'A' flammable liquid while any other compartment of the group is transporting class 'B' flammable liquid, unless adequate provision is made to avoid intermixture."

The foregoing provision is an excellent example of the wisdom of an industrial code specifying the end which must be accomplished and refraining from spelling out the manner of accomplishment. The designer is free to use or not use manifolds, just so long as "adequate provision is made to avoid intermixture." As of today, many companies have the self-imposed requirement that, if compartments of a vehicle are connected to a common outlet, all such compartments shall contain only products of the same class. On the other hand, many companies have taken advantage of the progressive developments, in recent years, of interlocking manifold systems, and have so successfully incorporated such systems in vehicle-tank installations as to provide adequate safeguards against intermixture.

5. Refinements in delivery procedure have extended to the realm of insuring to an increasingly progressive degree accurate calibration of the quantity of product delivered. In the interest of both vendor and customer, a large proportion of all deliveries by tank vehicle now passes through meters installed on the vehicle. As in the case of multi-compartments, this addition to the delivery system offered contamination possibilities. Rather than adopt the extreme requirement of definitely re-



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These hard workers are built big enough and rugged enough to truck full loads over rough oil country as if they enjoyed it.

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And that's not all! International has America's largest exclusive truck service organization. There are 4,700 International Dealers and 170 company-owned Branches throughout the country. If your International needs service, it gets it . . . whenever and wherever it needs it.

So—whether you haul oil-field equipment, high-octane gas, or crude oil, there's an on-highway or off-highway International that's right down your alley. Let your nearest International Dealer or Branch give you the facts *fast!*

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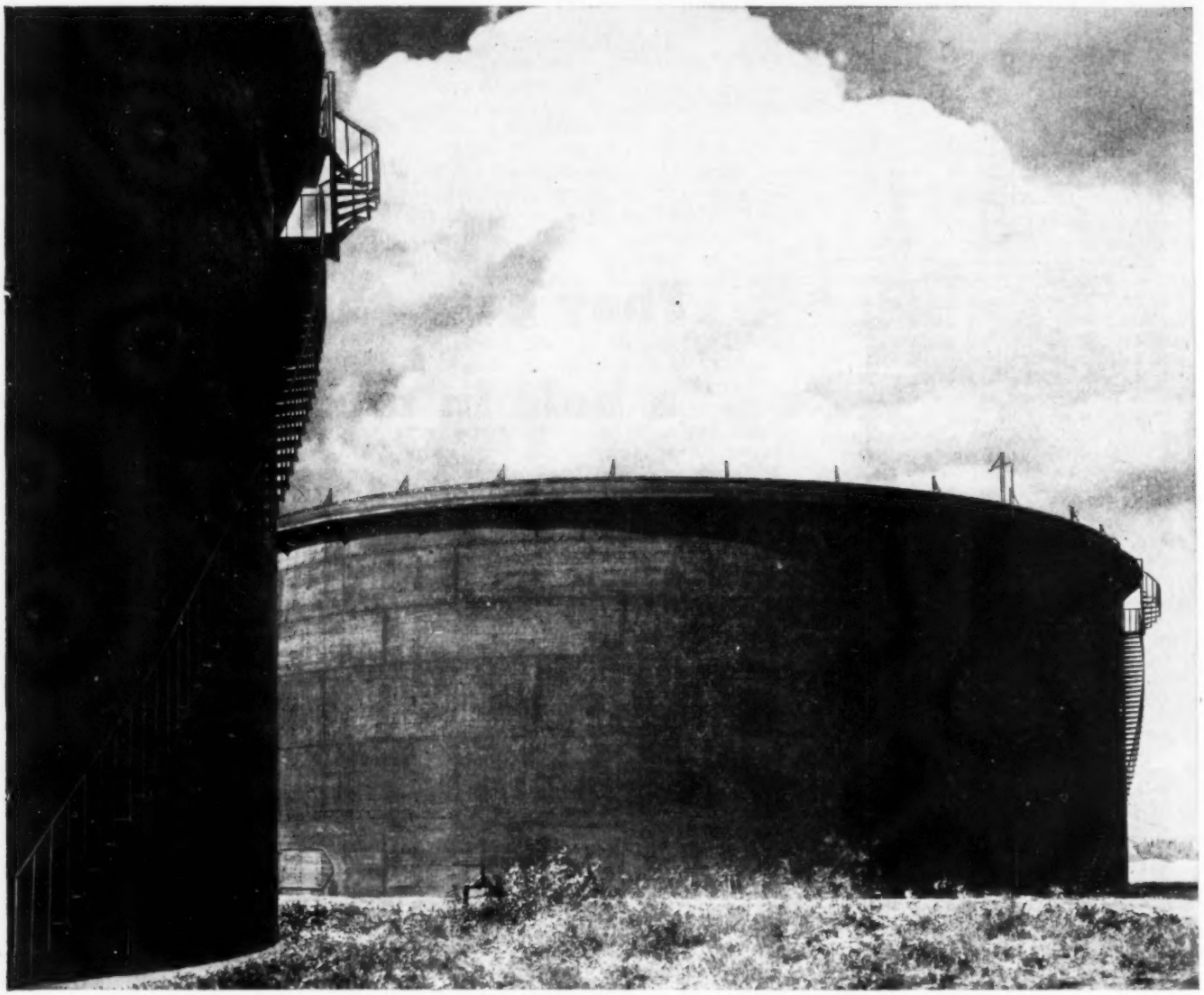

DOUBLE DECK—DOUBLE CHECK

If filling losses far exceed standing losses in your storage installation, the Graver Improved Floating Roof *with full double deck* is your best protection. It's designed to prevent all the filling losses *plus* as high as fifty percent of the standing losses . . . the greatest possible overall saving for such set-ups as a deep water terminal.

The double deck, in addition to providing a buoyancy that is positive assurance against sinking under any conditions of weather or climate, insulates the stored product effectively against "boiling". Lying directly upon the surface of the liquid and sloping upward from the center, the roof eliminates the accumulation of vapor which causes corrosion where "sour" crudes are stored.

For a double check where filling losses are the major problem, specify the Graver Floating Roof with full double deck.

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Graver offers a complete service to the petroleum industry including Expansion Roof Tanks, Floating Roof Tanks and pressure vessels. In addition, Graver is prepared to furnish specialized steel plate work such as fractionating columns and class one vessels as well as stainless and alloy fabrication; water conditioning equipment of all types; and through the Graver Construction Co., is prepared to handle all types of petroleum and chemical construction work.

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stricting each meter to one class of product, our industrial standard provides that "no such meter shall be alternately used for the measurement of class 'A' and class 'B' flammable liquids unless the meter and its accessory equipment have been flushed or otherwise cleared of class 'A' flammable liquid." (Sect. IV. Par. 4c, *API Standard* 1001, 1946 edition.) Herein we have another example of merely defining the end to be accomplished. (Parenthetically, it is recognized that it is sometimes impossible to use the same meter for different products due to the varied calibration characteristics of these different products. This, however, is a matter of measurement accuracy rather than product intermixture.)

6. Another field of potential intermixture is through the use of pump equipment on tank vehicles, the usage of which has vastly increased over the past decade. However, herein the same problems exist as in the field of meter usage, and the industrial standard accordingly gives it the same treatment. (Sect. IV, Par. 4d, *API Standard* 1001, 1946 edition.)

Avoidance of Extremes

Intra-company practices, industrial codes, and legislative requirements, no matter how complete they may be, cannot provide complete protection against the consequences of human frailties. Intermixtures resulting from errors in judgment or lapses in vigilance on the part of the individual can be reasonably controlled and minimized only through constant training of personnel and through frequent repetition of established rules and procedures. There has not as yet been devised any foolproof mechanism which, within the realm of commercial feasibility, will absolutely avoid all possibility of intermixes. Extremes in industrial codes in attempting to do so will not only make us a party to the promotion of undue public concern, but will unwarrantedly handicap distribution of petroleum products to the consuming public. Over the years the industry has been realistic in its approach to, and the solution of, the many problems attendant upon the handling of its flammable products. It has given prompt recognition to its responsibility to safeguard all phases of such handling. At the same time, it has given equal recognition to the fact that, to be of any use to the consumer, the product must be placed at his disposal and at a price commensurate with the value of the product to him. If we go to unwarranted extremes in our attempt to fulfill the first phase of this obligation, we are proportionately failing to fulfill the second phase.

Extremes in industrial codes promote extremes in legislative requirements. Legislative requirements, by reason of their very nature, are necessarily inflexible. The impediments of the industrial code are thus compounded, and impact on industrial operations is not conducive to economic soundness.

The For-Hire Carrier—His Place In the Field of Petroleum Hauling

Oil Man Tells Tank Truckers Their Limitations; Also Cites How and Where They Can Do Best Job

*By A. G. ANDERSON
General Traffic Manager
Socony-Vacuum Oil Co.

Tank truck hauling is a relatively young business. Probably all of us . . . remember its beginning. I can recall when the Leaman Transportation Co. started its first hauling about 20 years ago. The movement consisted of fuel oil from Marcus Hook to the Lukens Steel Co. at Coatesville, Pa.—a distance of about 35 miles. This was the first movement of any volume in the East and it was accomplished in spite of many obstacles which required considerable ingenuity and patience to overcome.

The for-hire carriers have grown from this small beginning until today a great number of substantial haulers are operating about 13,000 units with a carrying capacity of over 44 million gals.

In the meantime, passenger car registrations have increased from 20 million cars in 1927 to over 30 million in 1947. During the same time busses have increased from 27 thousand to 130 thousand and trucks from 3 million to 6½ million, to say nothing of the thousands of Diesel locomotives and millions of oil burners now in operation as contrasted to practically none 20 years ago.

The oil companies have also increased their tank truck fleets. In fact, the increase in their carrying capacity has, in the three-year period ending Jan. 1, 1947, been almost double that of yours. This is due to the tremendous demand for petroleum products throughout the world.

With such great quantities of liquid materials transported over such a wide area, a large amount of waste would normally be expected to occur. Yet almost every drop of oil which leaves a refinery finds its way into the tank of an ultimate consumer. Elimination of waste in transportation and storage is one of the most important factors in the industry's conservation program. It is a primary reason why petroleum products are available to the American consumer at such low prices, why a gallon of gasoline is cheaper to the consumer than is a gallon of distilled water.

Transportation efficiency begins right in the oil fields, where present methods of sending the crude to refineries offer a strange contrast with conditions which existed in the first years of the industry.

It was estimated that for a long time after the discovery of oil in Pennsylvania, 25% was lost between the well and the refinery, with an equal loss between refinery and retail distributor.

Modern handling methods and modern equipment have made loss through leakage or evaporation on this scale a thing of the past in transportation by tank car and truck, barge, and tanker—as well as in all storage plants. These conservation practices, perfected through the combined efforts of a progressive industry, extend down from the several hundred companies engaged in interstate transportation through the 20 thousand Independent wholesale distributors who deliver the finished products to homes, service stations, farms and plants across the nation.

The oil industry has used different forms of for-hire transportation to supplement or haul in lieu of our own trucks and boats, but we have never lost sight of the desirability of retaining for ourselves a good portion of the transportation required.

I cannot emphasize how strongly we feel about the right to transport our own products when and where we please, within the framework of existing laws, of course. Indeed, we consider this a "grandfather" right, if ever there was one.

What I am leading up to is that while the oil industry in general is not in the transportation business as such, we expect to continue doing a good share of our own trucking. This, to me, is the starting point of our relations with you; it is item No. 1 on the bill of fare.

Since we are sometimes told we keep the attractive or "gravy" hauls ourselves and give the "cats and dogs" to the for-hire carriers, let me explain that there are many factors to consider in deciding whether to use our own or for-hire trucks.

Type of Delivery a Factor

Among these are the type of delivery—that is, whether to a bulk plant, service station, home, apartment house, school, factory, railroad or ship. The size of storage tanks and hours of loading and unloading are probably next in importance.

We think that we can perform some types of delivery better or more

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* *Partial text of paper presented before National Tank Truck Carriers, Inc., meeting Oct. 8.*

economically than the outside carriers, or, in the case of service station and home fuel oil deliveries, we have not yet been inclined to entrust the transportation to a third party because of the customer relationship. Therefore, for the present at least there are many deliveries for which we will not use for-hire carriers.

However, thousands of deliveries can be made just as efficiently by either the for-hire trucks or our own. Here the cost of the two methods is of paramount consideration, and yet, we must also evaluate the for-hire carrier's service from the standpoint of the appearance of his equipment and his drivers.

The public generally bases its opinion of the industry on what it sees and its contacts with the people in that industry. Producing and manufacturing are relatively far removed from the public. High quality products are taken for granted. Impressions of the industry, therefore, are made, for the most part, on what and who the public sees. These are the marketers and the distributors and, to a very large extent, public opinion of you and of us is based on the service and appearance of the people engaged in these operations.

We don't expect your drivers to wear uniforms, but since labor at present is somewhat more plentiful, we believe some attention should be given to selecting drivers who make a good appearance. After all, we are hiring you as our agent to do the work which we might be doing ourselves and the drivers you employ should be by all means be personable and polite.

The appearance of the truck you use is also important. Naturally our main business is selling petroleum products and we depend on satisfied customers returning year after year in order that we stay in business. Our customers judge you by your trucks and drivers, but more important than that, they judge us at the same time for our selection of carriers. Of course, there are many degrees of neatness and courtesy but you can safely compare yours with ours and if you can better us you have tipped the balance in your favor. A good thing for us all to remember is—"Your appearance as you pass is most of your message to the world."

Dependability Stressed

The subject of service is a broad one and many books could be written on this, but I should like to say just one thing—I think your No. 1 Golden Rule *should be* "Keep your promises." Nothing upsets a shipper more than to get a phone call about 5 p.m., usually through a long chain of command, asking, "Where is that truck you promised for the first thing this morning?" Efficient dispatching not only is important to you for maximum operating efficiency but to the shipper and his customer who depend on you.

Since we operate trucks, too, we know that weather and strikes and the inevitable breakdowns sometimes upset the best laid plans but *please,* when you cannot make promised deliveries, *let us hear about it first from you.*

After all, you know about it before anyone else. If we are told about unforeseen delays we can at least be the first to tell the customer about it and likely some other arrangements can be worked out. If a day or two elapses it may be too late to take any steps. Try to put yourself in our position when you can't get there when you said you would.

Probably most important to our customers—next to good quality of products and prompt deliveries—is "full measure." People like to get what they pay for.

Recently, we found many of the for-hire trucks coming into our loading points had damaged, misplaced or even missing "markers" or calibration "clips." Consequently, we were experiencing shortages, and so were our customers. There was a general state of confusion among the carriers, their drivers, our loaders and our customers. We even found cases where calibration charts called for the manifolds and lines to be filled or "wet" lines but the carrier's drivers told our loaders they did not "like to ride with wet lines." We also found many trucks carrying no calibration charts and others with leaking valves, usually the internal ones. We finally decided that all trucks including our own would be loaded with wet lines. Incidentally, this gives you a little larger pay load on each trip. We also ruled that internal valves must be in good working order and must be kept closed while in transit.

We have just about finished our checking of markers, calibration charts and valves but for those who have not made a recent check of their equipment I heartily recommend it. Better not wait for the embarrassment of a shipper telling you that he will not load your equipment.

Safety of Special Concern

One of the most important subjects, if not *the* most important in which we are interested, is that of safety. "Safety is everyone's business." It is of special concern to us because a great percentage of our business consists of selling gasoline for passenger cars which are operated on the public highways. The safety and courtesy with which we operate our own trucks has a direct bearing on our gasoline sales. Also (and this is probably the most important aspect of the whole safety program), unless trucking interests improve their accident record there may well be more and more restricted legislation which will operate against your interests as well as ours. If carried far enough, this legislation may even result in much higher insurance costs.

Then too, there is another feature to be considered: the safest operator has the lowest costs, other things being equal, and this is reflected in his freight rates, which I don't need to tell you are a mighty important consideration in the selection of carriers. After all, your charges to us can't very well exceed what we can haul for ourselves.

If I could throw one stone of advice without shattering my own house, I should like to leave this thought with you. Take some time to look over your own operation for possible ways of economizing and increasing efficiency. Your plan to become self-insurers as to cargo coverage is to be commended. Any action along this line will pay off many times over. Don't wait for another carrier or the oil companies to take over your business. Benjamin Franklin once said something to the effect that the surest way to avoid competition was to whittle down your cost and take only a moderate profit instead of charging "all the traffic will bear."

Tanker Rates Begin Move Upward for Single Voyage

WASHINGTON—Government tanker experts last week reported that tanker rates are beginning to move upwards, with "three or four" ships fixed in past several days at rate 5 to 10% above U. S. Maritime Commission level for single voyages along East Coast and out of Persian Gulf.

"As we get further into the heating season," one official declared, "the rates may go as high as 50% above USMC." He saw "no possibility," of rates reaching peak of last winter when some tanker owners got as much as 250% above USMC on single voyage charters.

However, oil industry representatives have told government agencies they don't expect rates to rise higher than 20-30% over level established by USMC when latter owned and operated large number of tanker bottoms.

During summer, rates went down 10 to 20% below USMC figures and over 50 large tankers were laid up for lack of business.

One large oil company, it was said here, is making plans to withdraw 15 to 17 large tankships from its laidup fleet because of rate increase.

How "BIG" is a gallon?

At Shell it includes work in 1152 different kinds of jobs

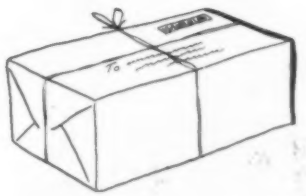
Combined efforts of the men and women in exploration, production, manufacturing, transportation, marketing, and research, make it possible for Shell to provide more than 1000 products from petroleum.

Every man, woman, child:

With petroleum products furnishing 48 percent of America's energy—almost equalling all other sources *combined*—annual requirements are over 90 billion gallons . . . or 628 for each man, woman, and child in the country. Now, look at the effort needed to produce *one* gallon of Shell gasoline . . .

Through the earth–2½ times:

Your gallon starts at *Production*, where wells are drilled and operated. Last year the industry drilled 20,000 miles, or 2½ times through the earth! Then comes the second big step, called *Manufacturing*, where refineries turn crude oil into liquid energy—the gasoline you use.



Extra special delivery:

Who moves the "crude" from fields to refineries, then starts gasoline off to you? *Transportation*, with trucks, tankers, trains, barges, pipelines, handles that job. And *Marketing*, the final link, sees that the gasoline you need is waiting at your Shell service station . . .

All pulling together.

A gallon of gasoline includes the work of each operating group, plus *Shell Research*, the essential ingredient. How *big* is a gallon? Measure it by the size of the job of making it—plus the convenience, comfort, health, and mobility which petroleum means to you.

Shell Oil Company
Incorporated

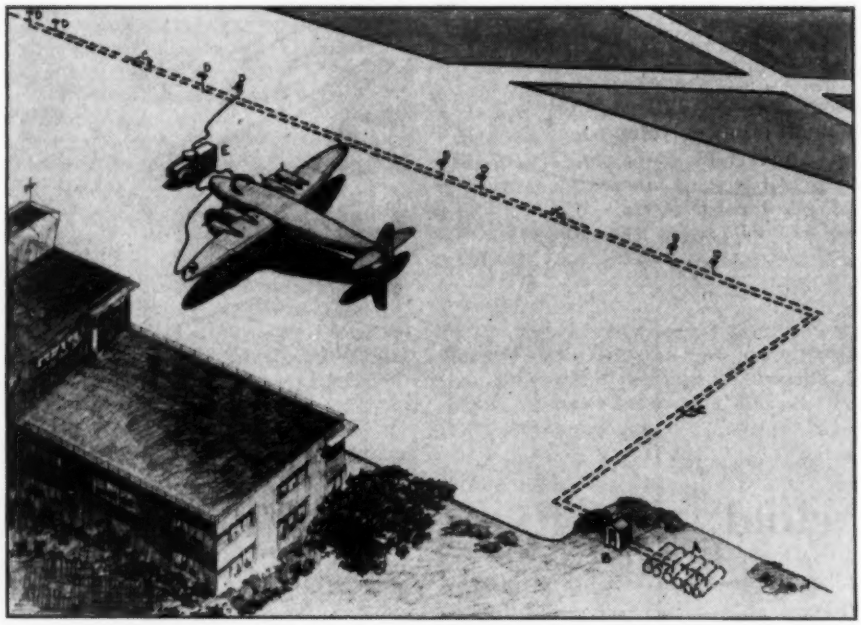
SHELL

A forward-looking company serves all 4:

1. *Consumer*
2. *Community*
3. *Employees*
4. *Shareholders*

Features of Hydrant System For Plane Fueling Is Shown

Portable Hydrant System Set up for Air Force; New Layout Cuts Fire Peril, Speeds Fueling



This is a typical hydrant refueling system layout of: A—fuel tankage, which can be above or below ground, but should be as close as possible to refueling points to secure adequate rates of flow at moderate pressures; B—pumping system, together with water separators and strainers and air releases to condition fuel for delivery; C—pipe line, generally underground; D—special hydrant valves for connecting and disconnecting with almost no product loss; E—hose cart—which here is typical of those used at New Orleans' Moissant International Airport and has facilities for tire inflation, lubrication and other service. A power take-off is included in the equipment

By BRUCE QUAYLE
NPN Staff Writer

FORT DIX, N. J.—A hydrant system for refueling commercial and military airplanes without the use of tank trucks, and operating on the same basic idea incorporated in every city's fire fighting facilities, is now being used both in this country and abroad. An air portable hydrant system also has been developed for use by the U. S. Air Force.

A demonstration of this hydrant system in use, together with an exhibit of all equipment developments in its connection, was held recently at McGuire Air Force Base of this post for more than 200 commercial and military observers from 28 countries by the Esso Standard Oil Co. and its affiliates, developers of the hydrant system for aircraft use.

Analogous with a fire department operation, the hydrant system at an airport consists of a fixed fuel storage tank installation; a pumping system; an underground fuel line running to a number of fixed hydrant points along the edge of and flush with the surface of the apron or runway; and a hosecart—the "fire engine" of the system—for connecting plane to fuel source.

Spillage Cut to Minimum

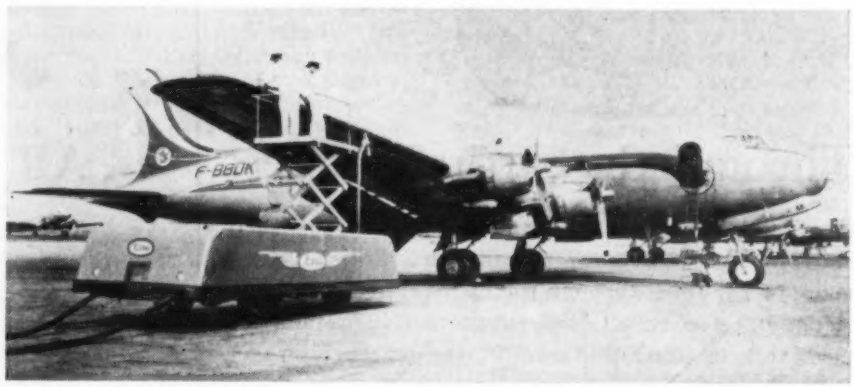
Heart of the hydrant system—and a necessary improvement on water handling in fire fighting operations—is the special hydrant valve which cuts product spillage to a minimum. The hydrant valve consists of two self-sealing connections, one on the fuel line in the flush pit and the other on the end of hose connecting to the fuel line. The mechanism used to connect hose to fuel line also opens the self-sealing valves and shuts them when disconnection takes place. When not in use hose remains full of fuel so that line pressure is maintained at all times when system is hooked up.

In the hydrant system, the so-called hosecart (a name which hardly fits the latest 10,000-lb. refinement of the vehicle) replaces the costly and limited-capacity tank truck as the vehicle on the field for refueling the plane. Like the fire engines, the hosecart is mainly a hose carried for connecting plane to hydrant. The most simple model contains hose reel and hose, a meter and a filtering device. More advanced models have this equipment mounted on a cart with hydraulically-operated ladders complete with a loading arm. The latest specially-designed model has built in booster pumps and a hydraulically elevated platform to bring attendants to wing level.

Advantages Cited

The inherent advantages of the hydrant system over the truck refueling system are briefly:

1. It reduces fire hazard by eliminating large quantities of fuel in a mobile tender on the field (6,000-gal.



Latest refinement in hydrant system hosecarts is the 10,000-lb. "Esso airport servicer," designed by Esso Export Corp. for servicing large planes. Vehicle has two new hosecart features: an elevating platform for lifting men and hose to wing level and high capacity pumps to supplement, when necessary, line pumps, both driven by a power take-off. "Servicer" has two seperate hose systems each capable of delivering 150 gallons per minute through a 2.5-in. hose. Cart has 100 ft. of hose, a refueling pump system, searchlights for night operations, and two printing meters in the driver's compartment. Costing approximately $12,500, the unit is 176 in. long, 91 in. wide and 54 in. high, with platform lowered. It is designed around a cab-over-engine truck chassis

fueling trucks are now being considered for airport refueling).

2. It improves safety by eliminating the movement of these large trucks in the congested area around planes being serviced (some of the newer trucks are over 50 ft. long).

3. It speeds up refueling by avoiding time lost in sending trucks back to the tank field area for refilling when empty. This is important where large volumes of fuel must be handled in peak periods.

4. It reduces installation, maintenance and operation costs on expensive trucks.

Domestically the hydrant system is now in use and has been since 1946 at Moissant International Airport, New Orleans, where it was installed by Esso Standard, sole fuel supplier at the field. The hydrant system is used at the Gander, Newfoundland, airport by Imperial Oil Limited, foreign brother of Esso Standard in the Standard Oil (New Jersey) family. Standard-Vacuum Oil Co., foreign operator owned jointly by Jersey Standard and Socony-Vacuum Oil Co., is using the hydrant system at airports supplied by it in the Far East and is expanding hydrant facilities at the present time.

In a co-operative effort by Esso Standard and the U. S. Air Force, the hydrant system was installed at this air base first for use in refueling jet fighters of the 1st Reconnaissance Group which participated in the International Air Show incident to the opening in late July of New York City's Idlewild Airport.

Air Portable System

Since that time, the Air Force has approved the installation at Dow Air Force Base, Bangor, Me., of a hydrant refueling system, that can be transported by air. The system uses 3,000-gal. capacity collapsible storage tanks.

Col. R. T. Zane, deputy for Materiel Headquarters, First Air Force, told the assembled observers here that use of the hydrant system had cut in half the refueling time in an experiment with fighter planes. He summarized the reasons why the Air Force is interested in the hydrant system, saying it: is a quick and complete installation, costs less than trucks for a similar amount of fuel, requires less personnel for maintenance, can be transported by air, and is easy to repair.

A tribute to Esso Standard for its pioneering effort in developing the hydrant system and for its co-operation in use of money and materials to test the system for military use was paid by Col. Frank L. Dunn, McGuire Base commanding officer.

M. J. Rathbone, Esso Standard president, spoke for the company and reviewed the development of the hydrant system. J. A. O'Donnell, chief safety engineer of the American Airline, discussed the safety advantages of the system in commercial use.

The group of more than 200, which attended an all-day demonstration of the hydrant system, was composed of representatives of Esso Export, and Standard-Vacuum, Air Force officers and enlisted personnel, attendees at the International Aviation Conference of Esso, and members of the general and trade press.

Oil Heat Fair Trade Code Completion Expected Soon

NPN News Bureau

WASHINGTON — Federal Trade Commission expects to have its version of proposed fair trade practices code for oil heating industry in six New England states drafted within a month (see Oct. 13 NPN, p. 58). It is expediting work so as to have code operative before this winter's heating season is over.

When draft is completed, FTC will notify interested parties, asking for their comments, and set date for hearing in Washington, probably around first of year. FTC will invite comments in writing also. After completion of hearing, FTC then will decide what, if any, changes it will make in final version.

It was emphasized that code, although requested by Oil Heat Institute of New England, will apply to all parts of U. S.

KIM Hotstart
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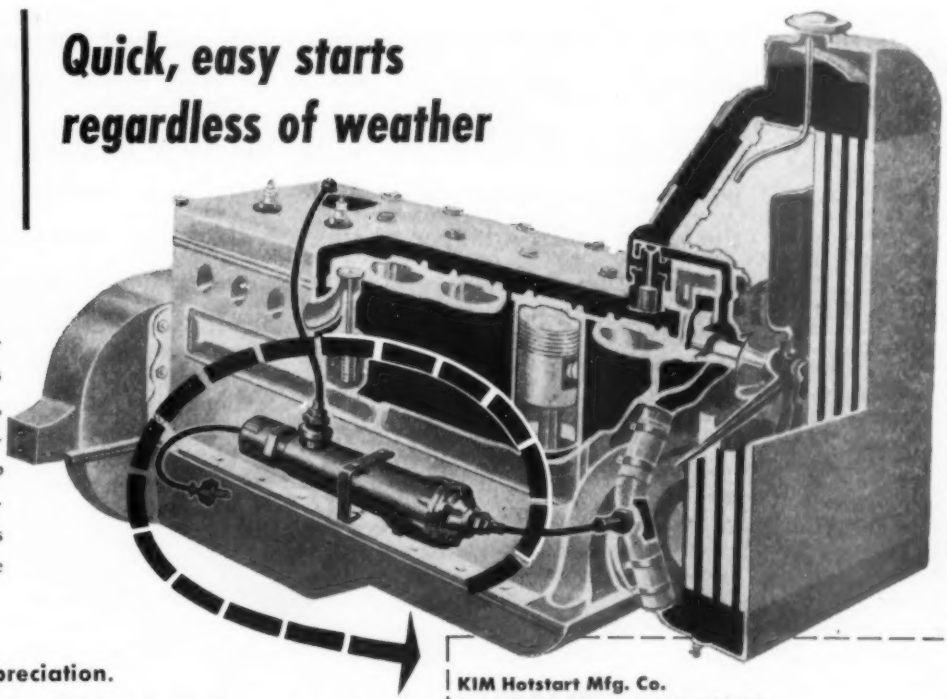

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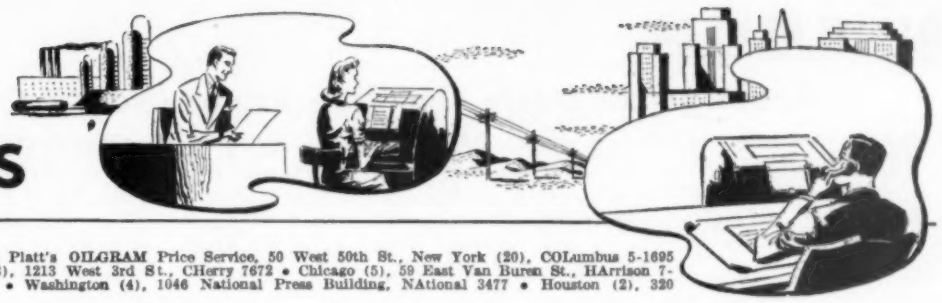

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Other OILGRAM News Bureaus: Cleveland (13), 1213 West 3rd St., CHerry 7672 • Chicago (5), 59 East Van Buren St., HArrison 7-5901 • Tulsa (3), 901 World Building, 3-7132 • Washington (4), 1046 National Press Building, NAtional 3477 • Houston (2), 320 First National Bank Bldg., Atwood 8-0413.

Residual Demand Is Off in All Areas as Prices Ease; Tension Declines over Crude Postings

Easing in residual prices was pronounced in the major refining districts of the nation during the first week of November. Crude oil markets remained unchanged with a 35c spread between major buyers' prices and those of some Independents, but most sources said tension over a general increase was on the wane.

Residual stocks continued to climb in the nation, but demand was lighter than anticipated. The number of sales and offerings at distress prices was on the increase, according to most reports. In the majority of refining areas, spot gasoline demand was light, and warm weather slowed replacement buying in distillates.

Lower prices were reported during the week for gasoline in Central Michigan, and Pennsylvania petrolatums and bright stock.

A clue to the extent of current stocks could be seen in the fact that gasoline and light fuel demand was light in the face of rising national consumption for these products. On the other hand, the Bureau of Mines reported that third quarter residual consumption was 5% less than that of a year ago.

The principal development in the crude oil markets was Phillips' entry as a buyer into the East Texas field with a price offer of $3.00 per bbl. flat. Magnolia, Gulf, Shell, and other major buyers in the big East Texas field continued to offer $2.65 per bbl. Of the 315,000-b/d flow of East Texas oil, Phillips is said by most crude sources to have obtained as yet only a small percentage by its higher posting.

Trading was light in refinery markets, but the feature of the week was the increased number of residual offerings available at sharp discounts. In some instances in the Midcontinent, the excess of heavy fuel had effected cut-backs in refinery production.

In the Midwest, a tank car marketer reported purchase of 50 cars of No. 6 fuel at $1.40 per bbl., Group 3; refiners' quotations for this product for Group 3 basis shipment ranged upward from $1.75 per bbl.

Two refiners in the Midcontinent cut their prices for No. 6 fuel 45c per bbl. to $1.75; no revival of heavy fuel buying in that area was reported.

There was little market at the Gulf for prompt residual sales to East Coast terminal operators, for most of them had full storage.

• • •

ATLANTIC COAST

Gasoline, Fuels Offered More Freely

Abundance of supplies and continued mild weather at most East Coast points brought more offerings to the spot market during the first week of November. There were some indications that suppliers now were more willing to relax their grip on gasoline and fuel inventories both with respect to allocations and new business. A general decline in "premium" spot prices for most products was noted. Residual fuels remained weak.

Contrary to general unwillingness of suppliers during 1948 to take on new fuel accounts, one supplier at New York last week relaxed the rule and took on the large-gallonage account of a leading distributor in that area. The latter reported that he had been "cut off" by the major company who had supplied him with gasoline and fuels for the past 19 years.

Despite the appearance of additional gasoline and heating oil offerings at New York Harbor trading was light. There were few buyers in the market, traders said, and a marked gap continued to exist between their price ideas and those of sellers. For No. 2 fuel offerings, asking prices ranged up to 10c, while most buyers were unwilling to go above 9.6c.

Two sales of No. 2 were reported: one of 10,000 bbls. by a major company to a jobber at 9.5c; another of several barges at 10c for mid-December delivery.

Several marketers at New York were reported offering kerosine in exchange for gasoline or No. 2 oil on a "one for two" basis.

Despite the pickup in his contract shipments of No. 6 fuel reported by a supplier, most sources said residuals generally continued "sloppy." Cargo offerings of bunker "C" were available at several seaboard points at prices ranging from $2.70 to $2.80, delivered. Barge offerings of "high-grade" No. 5 were readily available at $3.35, New York Harbor. Barge quotations for No. 6 fuel reported by suppliers at New York, Baltimore and Philadelphia ranged upward from $3.00. For No. 5 fuel at New York, suppliers reported prices ranging upward from $3.35.

Gasoline was easier, traders said, and retail sales were reported slightly lower at several points. At New York Harbor, asking prices reported for spot offerings ranged from 11.3 to 11.75c as compared with 11.75 to 12.5c the week before.

OIL MARKETS

Summary of Daily Gasoline Prices (Nov. 2 through Nov. 8)

U. S. Motor (ASTM octane)	Monday Nov. 8	Friday Nov. 5	Thursday Nov. 4	Wednesday Nov. 3	Tuesday Nov. 2
78-78.5 octane (Premium):					
Oklahoma (Group 3)	(2)11.25–12(2)	(2)11.25–12(2)	(2)11.25–12(2)	(2)11.25–12(2)	(2)11.25–12(2)
Midwestern (Group 3 basis)	(1)11.25–12(1)	(1)11.25–12(1)	(1)11.25–12(1)	(1)11.25–12(1)	(1)11.25–12(1)
N. Tex. (For shpt. to Tex. & N.M. dest'ns)	(2)11.8–13.3(1)	(2)11.8–13.3(1)	(2)11.8–13.3(1)	(2)11.8–13.3(1)	(2)11.8–13.3(1)
W. Tex. (For shpt. to Tex. & N.M. dest'ns)	(2)11.5–11.75(2)	(2)11.5–11.75(2)	(2)11.5–11.75(2)	(2)11.5–11.75(2)	(2)11.5–11.75(2)
E. Tex. (Truck Tnsp.)	(1)11.5–12(1)	(1)11.5–12(1)	(1)11.5–12(1)	(1)11.5–12(1)	(1)11.5–12(1)
Cent. W. Tex. (Truck Tnsp.)	(1)11.5–11.75(1)	(1)11.5–11.75(1)	(1)11.5–11.75(1)	(1)11.5–11.75(1)	(1)11.5–11.75(1)
73-75 octane (Regular):					
Oklahoma (Group 3)	(5)10.5–11(1)	(5)10.5–11(1)	(5)10.5–11(1)	(5)10.5–11(1)	(5)10.5–11(1)
Mid-Western (Group 3 basis)	(3)10.5–10.75(2)	(3)10.5–10.75(2)	(3)10.5–10.75(2)	(3)10.5–10.75(2)	(3)10.5–10.75(2)
N. Tex. (For shpt. to Tex. & N.M. dest'ns)	(2)10.75–11.3(1)	(2)10.75–11.3(1)	(2)10.75–11.3(1)	(2)10.75–11.3(1)	(2)10.75–11.3(1)
W. Tex. (For shpt. to Tex. & N.M. dest'ns)	(2)10.5–10.75(2)	(2)10.5–10.75(2)	(2)10.5–10.75(2)	(2)10.5–10.75(2)	(2)10.5–10.75(2)
E. Tex. (Truck Tnsp.)	(1)10.5–11(1)	(1)10.5–11(1)	(1)10.5–11(1)	(1)10.5–11(1)	(1)10.5–11(1)
Cent. W. Tex. (Truck Tnsp.)	(1)10.5–10.75(1)	(1)10.5–10.75(1)	(1)10.5–10.75(1)	(1)10.5–10.75(1)	(1)10.5–10.75(1)
63-66 octane:					
Oklahoma (Group 3)	....	....	....	....	....
Mid-Western (Group 3 basis)	10.125(1)	10.125(1)	10.125(1)	10.125(1)	10.125(1)
N. Tex. (For shpt. to Tex. & N.M. dest'ns)	....	....	....	....	....
W. Tex. (For shpt. to Tex. & N.M. dest'ns)	10.25(2)	10.25(2)	10.25(2)	10.25(2)	10.25(2)
E. Tex. (Truck Tnsp.)	....	....	....	....	....
Cent. W. Tex. (Truck Tnsp.)	10.25(1)	10.25(1)	10.25(1)	10.25(1)	10.25(1)
60 octane & below:					
Oklahoma (Group 3)	(1)9.75–10.125(2)	(1)9.75–10.125(2)	(1)9.75–10.125(2)	(1)9.75–10.125(2)	(1)9.75–10.125(2)
Mid-Western (Group 3 basis)	(1)9.75–10.375(1)	(1)9.75–10.375(1)	(1)9.75–10.375(1)	(1)9.75–10.375(1)	(1)9.75–10.375(1)
N. Tex. (For shpt. to Tex. & N.M. dest'ns)	(1)10–10.5(1)	(1)10–10.5(1)	(1)10–10.5(1)	(1)10–10.5(1)	(1)10–10.5(1)
W. Tex. (For shpt. to Tex. & N.M. dest'ns)	(1)9.75–10(3)	(1)9.75–10(3)	(1)9.75–10(3)	(1)9.75–10(3)	(1)9.75–10(3)
E. Tex. (Truck Tnsp.)	(1)9.75–10.5(1)	(1)9.75–10.5(1)	(1)9.75–10.5(1)	(1)9.75–10.5(1)	(1)9.75–10.5(1)
Cent. W. Tex. (Truck Tnsp.)	(1)10–10.4(1)	(1)10–10.4(1)	(1)10–10.4(1)	(1)10–10.4(1)	(1)10–10.4(1)
Motor Gasoline, 78-78.5 oct. (Premium) (b)					
New York harbor	(1)11.5–13.4(1)	(1)11.5–13.4(1)	(1)11.5–13.4(1)	(1)11.5–13.4(1)	(1)11.5–13.4(1)
New York harbor, barges	(1)11.4–13.3(1)	(1)11.4–13.3(1)	(1)11.4–13.3(1)	(1)11.4–13.3(1)	(1)11.4–13.3(1)
Philadelphia	(1)12.4–12.9(1)	(1)12.4–12.9(1)	(1)12.4–12.9(1)	(1)12.4–12.9(1)	(1)12.4–12.9(1)
Philadelphia, barges	(1)12.65–12.8(1)	(1)12.65–12.8(1)	(1)12.65–12.8(1)	(1)12.65–12.8(1)	(1)12.65–12.8(1)
Baltimore	(1)11–13(1)	(1)11–13(1)	(1)11–13(1)	(1)11–13(1)	(1)11–13(1)
Baltimore, barges	10.9(1)	10.9(1)	10.9(1)	10.9(1)	10.9(1)
Motor Gasoline 78-78.5 oct. (Premium) (c)					
New York harbor	....	....	....	....	....
New York harbor, barges	....	....	....	....	....
Philadelphia	(1)12.4–12.75(1)	(1)12.4–12.75(1)	(1)12.4–12.75(1)	(1)12.4–12.75(1)	(1)12.4–12.75(1)
Philadelphia, barges	12.65(1)	12.65(1)	12.65(1)	12.65(1)	12.65(1)
Baltimore	(1)12.2–12.75(1)	(1)12.2–12.75(1)	(1)12.2–12.75(1)	(1)12.2–12.75(1)	(1)12.2–12.75(1)
Baltimore, barges	12.65(1)	12.65(1)	12.65(1)	12.65(1)	12.65(1)
Motor Gasoline 74-76 oct. (Regular) (b)					
New York harbor	(1)10.5–12(1)	(1)10.5–12(1)	(1)10.5–12(1)	(1)10.5–12(1)	(1)10.5–12(1)
New York harbor, barges	(1)10.4–11.9(1)	(1)10.4–11.9(1)	(1)10.4–11.9(1)	(1)10.4–11.9(1)	(1)10.4–11.9(1)
Philadelphia	(2)11.5–11.9(3)	(2)11.5–11.9(3)	(2)11.5–11.9(3)	(2)11.5–11.9(3)	(2)11.5–11.9(3)
Philadelphia, barges	(1)11.4–11.8(1)	(1)11.4–11.8(1)	(1)11.4–11.8(1)	(1)11.4–11.8(1)	(1)11.4–11.8(1)
Baltimore	(1)10–12(1)	(1)10–12(1)	(1)10–12(1)	(1)10–12(1)	(1)10–12(1)
Baltimore, barges	(1)9.9–11.4(1)	(1)9.9–11.4(1)	(1)9.9–11.4(1)	(1)9.9–11.4(1)	(1)9.9—11.4(1)
Motor Gasoline:					
Western Penna., Bradford-Warren: 74-76 Oct. (Regular)	(1)11.75–12(1)	(1)11.75–12(1)	(1)11.75–12(1)	(1)11.75–12(1)	(1)11.75–12(1)
Western Penna., Other Districts:	(2)11.75–13(1)	(2)11.75–13(1)	(2)11.75–13(1)	(2)11.75–13(1)	(2)11.75–13(1)

Note: Gasoline prices are reported in each day's Platt's OILGRAM Daily Price Service. Figures shown in parentheses indicate number of companies quoting the low & highs of the ranges.
(b) Research octane rating is minimum of 5 points above Motor Method rating.
(c) Research octane rating is minimum of 10 points above Motor Method rating.

WESTERN PENNA.

Bright Stock Price Declines 2c

Lube prices, still wobbly from lack of export sales, took another downward turn last week and 25 pour test bright stock dropped 2c on the low side of the price range. According to most sources, wax, petrolatum, and lubes to jobbing trade were slow. Prices for light products were firm and demand strong for most.

Finished motor oils, alone of the lubes, were in good demand. There were only occasional calls for cylinder oils, while sales to jobbers of neutral and bright stock were irregular and in small quantities. Export inquiries in the market for lubes and wax, though sizeable in the aggregate, resulted in few sales or firm orders.

Current prices for 25 pour bright stock ranged from 28 to 44c following a decline of 2c late in the week. Most buyers said that 25 pour was available in quantity at 28c and 29c. Other reports indicated that 150 vis. 25 pour neutral was being offered from some quarters at 24c; but these reports could not be confirmed. Quotations for 150 vis. 25 p. t. neutral reported by refiners ranged from 26 to 36c.

A refiner reporting reductions of 4c in his prices for 600 and 630 flash cylinder oils, disclosed sales of moderate quantities of each at his new price of 33c for 600 flash and 35c for 630 flash. Prices for both grades reported by other refiners ranged upward to 39c.

Petrolatum demand was off, according to most sources, and prices were reduced 0.125 to 0.875c for most grades. Snow white now ranged upward from 6.375c; amber, from 4.125c.

Although the volume of light fuel sales was down from the comparable week in 1947, the demand on refiners from all accounts was said to be strong, leaving little opportunity for maintaining "satisfactory" inventories at refineries. Gasoline was more plentiful, refiners said, but while some gasoline offerings have made their way into the open market, no price shading was reported.

CENTRAL MICHIGAN

Heating Oil, Gasoline Demand Is Light

Warm weather continued to slow light fuel oil shipments during the first week of November, but some refiners reported jobber-demand for future delivery was strong. While stocks of light fuel were high at some refineries, most refiners were holding product for expected mid-November rise in demand. Sharply lower prices for regular-grade gasoline were reported, but slack demand depressed buying. Residual fuels continued generally soft with no price changes reported.

Most secondary storage in this area was reported full, but one jobber who buys year-around in open market

said for his November supplies he paid 13c for kerosine, 12.5c for range oil and 12c for No. 2 straw. A refiner with a "temporary surplus" reported spot sales of 100,000 gals. of No. 1 fuel at 12.75c and 80,000 gals. of No. 3 fuel at 12c through a tank car marketer.

Although prices tumbled when one refiner reported he was offering 2,500 bbls. of regular-grade gasoline at 12c, refinery, for November shipment, spot sale of 100,000 gals, of regular gasoline at 12.85c, refinery was reported by another refiner. A jobber reported buying 100,000 gals. of regular at 12.875c for November delivery. Inter-refinery offer of leaded straight-run gasoline "in any amount" at delivered Central Michigan price of 10.5c was also reported in market. Postings for straight-run gasoline reported by refiners ranged from 11.625 to 12.75c, for regular 12 to 14.5c, FOB refineries.

MIDCONTINENT

Residual Prices Continue to Weaken

Residual prices continued to weaken in the Midcontinent during the election week, and reductions in their prices ranging up to 45c per bbl. were reported by several refiners. Gasoline demand was good for the season, several refiners said.

An Oklahoma refiner reported reduction of 45c in his price for No. 6 fuel to $1.75, and another 5c to $1.70, resulting in new price range from $1.70 to $2.00 in that district. In North Texas, No. 6 fuel was quoted at $1.75 flat price following a refiner's cut of 45c per bbl. to that price. Generally speaking, refiners said they noted no revival in residual buying, although some sources reported receiving some inquiries for No. 5 oil.

Reports that No. 6 had sold at $1.47 per bbl., FOB Group 3, and that 20 cars had been sold from an East Texas plant at $1.35 per bbl., FOB Group 3, could not be confirmed.

Light fuel demand, although steadily increasing, was reported considerably below this time last year due to unseasonal warm weather.

Reduction of 2c in his bright stock prices to 31c for 150-160 vis.D 0-10 was disclosed by a Midcontinent refiner, but existing price ranges were not affected. Some tightening in solvent bright stock was indicated from report of a Midcontinent refiner who said he had received a bid of 37c for a "sizeable quantity" of 150 vis. 95 V. I.

MIDWESTERN (Chicago-E. St. Louis Area)

High Stocks Weigh on Prices

Stocks were high in the Midwest the past week, and prices eased for most products. Light fuels were beginning to be offered at the secondary supply level in Chicago as mild weather held consumption to a minimum. Despite reports of some large sales of No. 6 fuel, most refiners said they were troubled by an over-abundance of heavy fuel. Spot gasoline demand was slack, according to most reports.

Along with substantial offerings of No. 2 fuel, kerosine, tight up to now in open market, was offered in volume by distributors in the Chicago area trying to make room for their November allotments. One source reported a total of 600,000 gals. of 41-43 kerosine had been offered to him, part at 12c and part delivered to his storage at 12.125c.

Tank car marketers reported prices for No. 2 fuel were "slipping." Offerings were reported at prices ranging from 0.125 to 0.25c under Group 3 basis postings of refiners. One marketer said he bought one car of No. 2 at 8.75c, Group 3. Several buyers said Texas refiners were absorbing freight to Group 3 and meeting the lower prices for spot material.

Service station sales of gasoline were reported high by many sources. Two large distributors said weekend sales were "very good," but refiners with gasoline to move in open market found it difficult to locate buyers. One refiner reported he had bid 12c for 10,000 bbls. of regular-grade gasoline offered to him at 13.5c delivered Minneapolis. A marketer said he had bought "a few" cars of high-jump regular gasoline at 10.25c, Group 3, and another marketer said he was offering regular at 10.25c, Group 3 basis.

Prices for No. 6 fuel ranged from $1.75 to $2.00 per bbl., Group 3, a reduction on both high and low of range when a refiner reported he had lowered his posting 45c per bbl. to $1.75. Sale of 20,000 bbls. of No. 6 fuel at $1.85 per bbl., Group 3, was reported by one marketer, while another said he had bought 50 cars at $1.40 per bbl., Group 3. Most buying sources said amount of product offered at $1.40 per bbl., Group 3, was "substantial."

GULF COAST

Fuel Oil Prices Ease in Quiet Dealings

Election week saw quiet cargo trading at the Gulf Coast, and most traders said that light demand for fuel oils and gasoline was causing prices to ease. Scarcest product on the market was kerosine, according to most reports.

Early November selling was limited to barge quantities, according to reports from suppliers. No spot cargo business was reported, although some cargo trades were said to be in progress.

Easing in prices was most readily discernible in fuel oils, traders said. No. 2 fuel cargoes were reported available at 8.75c for November loading; sales of No. 2 during October totaling 10 cargoes took place at 9c.

Unsold offerings of residual fuels continued to hang over the market, and most reports indicated that distress quantities of bunker "C" fuel were on the increase. While the generally quoted price for cargoes of bunker "C" fuel continued $2.46 per bbl., most buyers said they were of opinion that a firm bid for prompt loading could provoke an offering at a substantial discount.

Barge sales of gasoline reported by Independent suppliers included one of no-jump premium at 10.875c and another at 11.75c. A 10,000-bbl. barge of no jump regular-grade gasoline was reported sold for 11.125c.

Buyers seeking kerosine said it was difficult to find material available in cargo quantities. Other sources said kerosine was being used by some suppliers as trading material to bring their general supply position into better balance. One barge of kerosine was reported sold at 10.25c, and another was offered at the same price.

Suppliers' prices for regular-business transactions were unchanged.

Crude Oil Prices

No changes in crude oil prices reported during week ended Nov. 6. See Oct. 27 NPN, p. 52-53, for complete price schedules.

OIL PRICE SECTION

At Refineries and Terminals and by Tank Wagon

Prices herewith are reproduced from Platt's *OILGRAM* Daily Oil Price Service, associated with National Petroleum News, whose representatives in all *NPN-OILGRAM* offices devote their time exclusively to reporting oil industry prices everywhere.

Prices shown in tables are sales prices or quotations or general offers or posted prices by refiners, by pipeline terminal operators, and by tanker terminal operators; for current sales and shipments; for the business day or period stated; except Tank Wagon prices, prices are for bulk lots such as tank car, truck transport, barge; prices applying to barges or cargoes or truck transport lots only, so designated; FOB refineries or terminals; in cents per gal., except per bbl. where $ sign is shown; wax and petrolatums in cents per pound; ex all fees and taxes; for crude oil and its products lawfully produced and transported; reported as received by *OILGRAM* and National Petroleum News but not guaranteed; for subscribers' private use only and not for resale or distribution or publication. Octane ratings are ASTM unless otherwise noted. Parenthetical figures before and after prices indicate number of companies quoting the lows and highs of the ranges. For further details of price conditions apply to any *NPN—OILGRAM* office or see back of any *OILGRAM* Price Service invoice.

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Refinery & Terminal Prices

Gasoline

Prices in Effect	Nov. 8	Nov. 1
OKLAHOMA (Group 3)		
78-78.5 Oct. (Prem.)	(2)11.25–12(2)	(1)11.25–12(2)
73-75 Oct.Reg.	(5)10.5–11(1)	(4)10.5–11(1)
60 Oct. & below	(1)9.75-10.125(2)	(1)9.75-10.125(2)
MID-WESTERN (Group 3 basis)		
78-78.5 Oct. (Prem.)	(1)11.25–12(1)	(1)11.25–12(1)
73-75 Oct.Reg.	(3)10.5-10.75(2)	(3)10.5-10.75(2)
63-66 Oct.	10.125(1)	10.125(1)
60 Oct. & below	(1)9.75-10.375(1)	(1)9.75-10.375(1)
N. TEX. (For shpt. to Tex. & N.M. dest'ns.)		
78-78.5 Oct. (Prem.)	(2)11.8–13.3(1)	(2)11.8–13.3(1)
73-75 Oct. (Reg.)	(2)10.75–11.3(1)	(2)10.75–11.3(1)
60 Oct.&below	(1)10–10.5(1)	(1)10–10.5(1)
W. TEX. (For shpt. to Tex. & N.M. dest'ns.)		
78-78.5 Oct. (Prem.)	(2)11.5–11.75(2)	(2)11.5–11.75(2)
73-75 Oct.Reg.	(2)10.5–10.75(2)	(2)10.5–10.75(2)
63-66 Oct.	10.25(2)	10.25(2)
60 Oct.& below	(1)9.75–10(3)	(1)9.75–10(3)
E. TEX. (Truck tnspt.)		
78-78.5 Oct.	(1)11.5–12(1)	(1)11.5–12(1)
73-75 Oct.	(1)10.5–11(1)	(1)10.5–11(1)
60 Oct.& below	(1)9.75–10.5(1)	(1)9.75–10.5(1)
CENT. W. TEX. (Truck Transpt.)		
78-78.5 Oct. (Prem.)	(1)11.5–11.75(1)	(1)11.5–11.75(1)
73-75Oct.(Reg.)	(1)10.5-10.75(1)	(1)10.5-10.75(1)
63-66 Oct.	10.25(1)	10.25(1)
60 Oct.& below	(1)10–10.4(1)	(1)10–10.4(1)
KANSAS (For Kansas destinations only)		
78-78.5 Oct. (Prem.)	(1)11.8–12.75(1)	(1)11.8–12.75(1)
73-75 Oct.Reg.	(2)10.8–11.75(1)	(2)10.8–11.75(1)
60 Oct.& below	(1)10.1–11(1)	(1)10.1–11(1)
ARK. (For shipment to Ark. & La.)		
78-78.5 Oct. (Prem.)	11.75(1)	11.75(1)
73-75 Oct. Reg.	10.75(1)	10.75(1)
60 Oct.& below, unleaded	10(1)	10(1)
WESTERN PENNA.		
Bradford-Warren:		
74-76 Oct.Reg.	(1)11.75–12(1)	(1)11.75–12(1)
Other districts:		
74-76 Oct.Reg.	(2)11.75–13(1)	(2)11.75–13(1)
CENTRAL MICHIGAN (FOB Central Michigan refineries.)		
U.S. Motor:		
78-78.5 Oct. (Prem.)	(1)13.55–15(1)	(1)13.55–15(1)
73-75 Oct.Reg.	(1)12–14.5(1)	(1)12.875-14.5(1)
Str. run gasoline, excl. Detroit shpt.	(1)11.625-12.75(2)	(1)11.625-12.75(2)

SPECIAL NOTICE

Owing to present short supply of many products, some sellers are withholding public quotations or the posting of firm prices on some products but are giving OILGRAM the prices they otherwise would quote to trade in general and which today they confine mostly to their regular customers only.

Prices in Effect	Nov. 8	Nov. 1
OHIO—Quotations of S.O. Ohio for delivery to Ohio points:		
73-75 Oct..	14.75	14.75
CALIFORNIA		
Los Angeles dist.:		
80-82 Oct. (Prem.)	(1)14.65–15.9(1)	(1)14.65–15.9(1)
74-76 Oct. (Reg.)	(1)13.15–13.4(3)	(1)13.15–13.4(3)
San Fran. dist.:		
80-82 Oct. (Prem.)	(1)15.15–16.4(1)	(1)15.15–16.4(1)
74-76 Oct. (Reg.)	(1)13.65–13.9(1)	(1)13.65–13.9(1)
San Joaquin Valley:		
80-82 Oct. (Prem.)	(1)15.15–16.4(1)	(1)15.15–16.4(1)
74-76 Oct. (Reg.)	(1)13.65–13.9(1)	(1)13.65–13.9(1)

Kerosine, Gas & Fuel Oils

Prices in Effect	Nov. 8	Nov. 1
OKLAHOMA (Group 3)		
41-43 w.w. kero.	(1)9.5–9.75(1)	(1)9.5–9.75(1)
42-44 w.w.	(3)9.5–9.875(3)	(2)9.5–9.875(3)
Range oil	9.5(4)	9.5(4)
58 & above D.I. diesel	(1)9.25-10.125(1)	(1)9.25-10.125(1)
No. 1 p.w.	9.25(3)	9.25(3)
No. 1 straw	(3)9.25–9.375(4)	(3)9.25–9.375(2)
No. 2 straw	(2)9–9.25(4)	(2)9–9.25(4)
No. 6	(1)$1.70–2.00(3)	(1)$1.70–2.00(3)
14-16 grav. fuel	$2.00(1)	$2.00(1)
MIDWESTERN (Group 3 basis)		
41-43 w.w.	(1)9.375–9.75(1)	(1)9.375–9.75(1)
42-44 w.w.	(3)9.5–9.875(2)	(3)9.5–9.875(2)
Range oil	(1)9.25–9.5(2)	(1)9.25–9.5(2)
58 & above D.I. diesel	(1)9.5–10.125(1)	(1)9.5–10.125(1)
No. 1 p.w.	(2)9.125-9.375(1)	(2)9.125-9.375(1)
No. 2 straw	(3)9–9.25(1)	(3)9–9.25(1)
No. 3	(1)8.75–8.875(1)	(1)8.75–8.875(1)
No. 6	(1)$1.75-2.00(2)	(1)$1.80–2.20(1)
CHICAGO—(FOB Chicago district refineries & p.l. terminals; all fuel oil prices in cnt. per gal.)		
58 & above D.I. diesel	11.05(1)	11.05(1)
No. 6 fuel	7.4(1)	7.4(1)
N. TEX. (For shpt. to Tex. & N.M. dest'ns.)		
41-43 w.w.	(1)9.6–9.625(1)	(1)9.6–9.625(1)
42-44 w.w.	10(2)	10(2)
58 D.I.	(1)9.6–10(2)	(2)9.6–10(2)
No. 2 straw	9(1)	9(1)
No. 6 fuel	$1.75(1)	$1.75(1)
W. TEX. (For shpt. to Tex. & N.M. dest'ns.)		
41-43 w.w.	9.5(1)	9.5(1)
42-44 w.w.	10.5(1)	10.5(1)
No. 1 straw	9.25(2)	9.25(2)
No. 2 straw	(2)9–9.25(2)	(2)9–9.25(2)
No. 3	8.75(1)	8.75(1)
No. 6 fuel	$2.50(1)	$2.50(1)
E. TEX. (Truck trnspt.)		
41-43 w.w.	(2)9.25–9.5(2)	(2)9.25–9.5(2)
42-44 w.w.	(2)9.5–9.75(1)	(2)9.5–9.75(1)
58 & above D.I. diesel	(1)9–10(1)	(1)9–10(1)
No. 2 fuel	9.25(2)	9.25(2)
No. 6 fuel	(1)$1.90–2.85(1)	(1)$1.90–2.85(1)
CENT. W. TEX. (Truck trnspt.)		
41-43 w.w.	(1)9.375–9.5(1)	(1)9.375–9.5(1)
58 & abv. D.I. Diesel	9.25(1)	9.25(1)
U.G.I. gas oil	8.5(1)	8.5(1)
No. 1 fuel	9.25(1)	9.25(1)
No. 2 fuel	9(1)	9(1)
No. 3 fuel	8.75(1)	8.75(1)
No. 6 fuel	$2.67(1)	$2.67(1)
KANSAS (For Kansas destinations only)		
42-44 w.w.	(1)9.75–10.813(1)	(1)9.75–10.813(1)
58 & abv. D.I. Diesel	(2)10–10.25(1)	(2)10–10.25(1)
No. 1 fuel	(1)9.375-10.25(1)	(1)9.375-10.25(1)
No. 2 fuel	(2)9.25–10(2)	(2)9.25–10(2)
No. 6 fuel	(1)$1.90–2.65(1)	(1)$1.90–2.65(1)
ARK. (For shipment to Ark. and La.)		
42-44 w.w.	9.625(1)	9.625(1)
Tractor fuel	10(1)	10(1)
Diesel fuel 52 & below	9.25(1)	9.25(1)
Diesel fuel 58 & above	9.5(1)	9.5(1)
No. 2 fuel	9.125(1)	9.125(1)
No. 3 fuel	8.875(1)	8.875(1)
WESTERN PENNA.		
Bradford-Warren:		
45 w.w.	(1)11.25–12(1)	(1)11.25–12(1)
No. 1 fuel	11.95(1)	11.95(1)
No. 2 fuel	(1)11–11.95(1)	(1)11–11.95(1)
No. 3 fuel	11(1)	11(1)
36-40 gravity	11.95(1)	11.95(1)
Other districts:		
45 w.w.	(1)11.25–12.5(1)	(1)11.25–12.5(1)
47 w.w.	(1)12–13(1)	(1)12–13(1)
No. 1 fuel	(1)11.25–12.5(1)	(1)11.25–12.5(1)
No. 2 fuel	(2)11–12.5(1)	(2)11–12.5(1)
No. 3 fuel	(1)11–12(1)	(1)11–12(1)
36-40 gravity	(2)11–12.5(1)	(2)11–12.5(1)
CENTRAL MICHIGAN (FOB Central Michigan refineries.)		
Range oil	(1)12.25–13(2)	(1)12.25–13(2)
46-49 w.w. kero.	(1)12.5–13.25(1)	(1)12.5–13.25(1)
P. W. distillate	(3)12.25–13(1)	(3)12.25–13(1)
No. 2 light straw	(3)12–12.25(1)	(3)12–12.25(1)
No. 3 straw	(1)11.75-12.375(1)	(1)11.75-12.375(1)
U.G.I. gas oil	(1)10–11.75(1)	(1)10–11.75(1)
No. 5 fuel	(1)9.5–10.75(1)	(1)9.5–10.75(1)
No. 6 fuel	(1)8.5–10(1)	(1)8.5–10(1)
OHIO—Quotations of S.O. Ohio for delivery to Ohio points:		
Kerosine	13.9	13.9
CALIFORNIA		
San Joaquin Valley:		
40-43 w.w.	12.4(1)	12.4(1)
Heavy fuel	$2.30(2)	$2.30(2)
Light fuel (PS 300)	$2.50(2)	$2.50(2)
Diesel fuel (PS 200)	(1)9.6–10.1(1)	(1)9.6–10.1(1)
Stove dist. (PS 100)	(1)11.1–11.6(1)	(1)11.1–11.6(1)
Los Angeles:		
40-43 w.w.	(3)11.9–12.9(1)	(3)11.9–12.9(1)
Heavy fuel (PS 400)	(1)$2.15–2.32(1)	(1)$2.15–2.32(1)
Light fuel (PS 300)	(4)$2.45–2.52(1)	(4)$2.45–2.52(1)
Diesel Fuel (PS 200)	(1)8.8–9.6(2)	(1)8.8–9.6(2)
Stove dist. (PS 100)	(1)9.25–11.1(2)	(1)9.25–11.1(2)
San Francisco:		
40-43 w.w.	12.4(2)	12.4(2)
Heavy fuel (PS 400)	$2.30(2)	$2.30(2)
Light fuel (PS 300)	$2.50(2)	$2.50(2)
Diesel fuel (PS 200)	(1)9.6–10.4(1)	(1)9.6–10.4(1)
Stove dist. (PS 100)	(1)11.1–11.9(1)	(1)11.1–11.9(1)

Lubricating Oils

WESTERN PENNA.

Prices are for sales made, or offers reliably reported, to jobbers & compounders only.

VISCOUS NEUTRALS—No. 3 col. Vis. at 70° F.

200 Vis. (180 at 100°) 420-425 fl.		
0 p.t.	38.5(1)	47(1)
10 p.t.	37.5(1)	46(1)
15 p.t.	36.5(1)	45(1)
25 p.t.	28–43	28–43
150 Vis. (143 at 100°) 400-405 fl.		
0 p.t.	36.5(1)	45(1)
10 p.t.	35.5(1)	44(1)
15 p.t.	34.5(1)	43(1)
25 p.t.	26–28	26–36
CYLINDER STOCKS: Brt. stk., 145-155 vis. at 210°, 540-550 fl., No. 8 col.		
10 p.t.	40.5(1)	49(1)
15 p.t.	39.5(1)	48(1)
25 p.t.	28–44	30–44
600 S.R. filter'bl.	31–36	32–36
650 S.R.	32–37	34–37
600 fl.	33–39	35–39
630 fl.	35–37	37–41

MID-CONTINENT

Neutral Oils (Vis. at 100° F. 0 to 10 P.P.)

Pale Oils		
Vis. Color		
60-85—No. 2	(2)11–12.75(1)	(2)11–12.75(1)
86-110—No. 2	(2)11.5–13.25(1)	(2)11.5–13.25(1)
150—No. 3	18(3)	18(3)
180—No. 3	(3)18.5–21(1)	(3)18.5–21(1)
200—No. 3	(4)19–21(1)	(3)19–21(1)
250—No. 3	(3)20–22(1)	(3)20–22(1)
280—No. 3	(3)21–23(1)	(3)21–23(1)
300—No. 3	(2)22–24(1)	(2)22–24(1)
Red Oils:		
200—No. 5	(1)19–21(1)	(1)19–21(1)
300—No. 5	24(1)	24(1)
Bright Stock—Vis. at 210° (FOB Tulsa basis)		
200 Vis. D.	35(1)	35(1)
150-160 Vis. D:		
0 to 10 p.p.	(3)31–33(1)	(3)31–33(1)
10-25 p.p.	30.5(1)	30.5(1)
25-40 p.p.	....	....
150-160 Vis. E	32(1)	32(1)
120 Vis. D.		
0 to 10 p.p.	(3)30–32(1)	(3)30–32(1)
600 S.R. (Olive Green)	23(2)	23(2)
Black Oil	18.5(1)	18.5(1)

SOUTH TEXAS (Neutral Oils)

(Vis. at 100° F. FOB refineries for domestic and/or export shipment.)

PALE OILS:		
VIS. COLOR		
100 1½-2½	(2)9.5–11(2)	(2)9.5–11(2)
200 No. 2-3	(4)12–13.5(1)	(4)12–13.5(1)
300 No. 2-3	(5)13–14.5(1)	(5)13–14.5(1)
500 No. 2½-3½	(4)14–15.5(1)	(4)14–15.5(1)
750 No. 3-4	(4)15–16.5(1)	(4)15–16.5(1)
1200 No. 3-4	(5)16–17.5(1)	(5)16–17.5(1)
2000 No. 4	(3)17–18.5(2)	(3)17–18.5(2)
RED OILS:		
100 No. 5-6	(2)9.5–11(1)	(2)9.5–11(1)
200 No. 5-6	(4)12–13.5(1)	(4)12–13.5(1)
300 No. 5-6	(5)13–14.5(1)	(5)13–14.5(1)
500 No. 5-6	(4)14–15.5(1)	(4)14–15.5(1)
750 No. 5-6	(4)15–16.5(1)	(4)15–16.5(1)

(Continued on next page)

Prices in Effect	Nov. 8	Nov. 1
750 No. 5-6.	(4)15–16.5(1)	(4)15–16.5(1)
1200 No. 5-6.	(5)16–17.5(1)	(5)16–17.5(1)
2000 No. 5-6.	(3)17–18.5(2)	(3)17–18.5(2)

CHICAGO (From Mid-Continent p.l. crude)
Neutral oils vis. at 100° F. 0 to 10 pp.

Pale Oils: Vis. Color		
60-85—No. 2.	12.75(1)	12.75(1)
86-100—No. 2	13.25(1)	13.25(1)
150—No. 3 ..	20(1)	20(1)
180—No. 3 ..	20.5(1)	20.5(1)
200—No. 3 ..	20.5(1)	20.5(1)
250—No. 2 ..	21.5(1)	21.5(1)
Red Oils:		
180—No. 5 ..	20.5(1)	20.5(1)
200—No. 5 ..	20.5(1)	20.5(1)
250—No. 5 ..	21.5(1)	21.5(1)
280—No. 5 ..	22.5(1)	22.5(1)
300—No. 5 ..	23(1)	23(1)

Note: Viscous oils, 15 to 30 p.p. are quoted 0.5c lower; 60-85 and 86-110 No. 2 non-viscous oils, 15 to 30 p.p. 0.25c lower.

Unfiltered Steam Refined (Viscosity at 210°)		
140	22.5(1)	22.5(1)
160	23.5(1)	23.5(1)
200	24.5(1)	24.5(1)
Bright Stocks, 160 vis. at 210° No. 8 color		
0 to 10 p.p.	32(1)	32(1)
15 to 25 p.p.	31.5(1)	31.5(1)
30 to 40 p.p.	31(1)	31(1)
E filtered Cyl. Stock.	24.5(1)	24.5(1)

Note: To obtain prices delivered in Chicago add 0.6c per gal.

Natural Gasoline

(Group 3 & Breckenridge prices are to blenders on freight Basis shown below. Shipments may originate in any Mid-Continent manufacturing district.)

FOB GROUP 3		
Grade 26-70	8.5(Sales)	8.5(Sales)
FOB BRECKENRIDGE		
Grade 26-70	8(Quote)	8(Quote)

LPG Prices

(Of refiners, FOB refineries, in cents per gal., tank cars or transport trucks)

District	Commercial Propane	Industrial Propane	Commercial Butane	Industrial Butane
N.Y. Harbor..	9(2)	9(1)	9(1)	9(1)
Philadelphia ..	9(2)	....	....	....
Baltimore ...	9(1)	....	....	....
Hastings, W. Va.	8.25(1)	....	7.5(1)	....
New Orleans.	.6.375(1)	....	....	....
Toledo	9(1)	....	9.25(1)	....

(a) Tank cars only.

Naphthas and Solvents

(FOB Group 3)

Stoddard solvent	(4)10.875-11.625(1)	(4)10.875-11.625(1)
Cleaners npth.	(4)11.375-12.125(1)	(4)11.375-12.125(1)
V.M.&P. Npth.	(6)11.375-12.125(1)	(6)11.375-12.125(1)
Mineral Spirits.	(5)10.375-11.125(1)	(5)10.375-11.125(1)
Rubber solv.	.(1)10.875-11.375(4)	(1)10.875-11.375(4)
Lacquer dil.	..(3)11.625-12.625(1)	(3)11.625-12.625(1)
Benzol dil.	(2)12.125-12.55(1)	(2)12.125-12.55(1)
WESTERN PENNA.		
Other Districts:		
Untreated Npth.	12.5(1)	12.5(1)
Stoddard Solv.	(2)13–14(1)	(2)13–14(1)

OHIO—Quotations of S.O. Ohio for delivery to Ohio points:

VM&P Naphtha, Mineral Spirits & Stoddard Solvent	16	16
Rubber solvent	15.5	15.5
E. TEXAS (Truck Trnspt.)		
Stoddard solv.	....(1)10.75-11.25(1)	(1)10.75-11.25(1)
KANSAS (For Kan. Dest'n. only)		
Stoddard Solv.	.(1)11.375-12.375(1)	(1)11.375-12.375(1)

WAX

WESTERN PENNA. (Bbls. C.L.)		
White Crude Scale:		
122-124 A.m.p.	(3)5.75–9(1)	(3)5.75–9(1)
124-126 A.m.p.	(3)5.75–9(1)	(3)5.75–9(1)

CHICAGO (FOB Chicago District refinery of one refiner in bags or 100 lb. cartons, carloads. Carloads, slabs loose, 0.7c less. Melting points are EMP (ASTM methods); add 3° F. to convert into AMP.

Fully refined:		
122-124	7.7	7.7
125-127	7.8	7.8
127-129	8	8
130-132	8.05	8.05
132-134	8.3	8.3
135-137	8.7	8.7

Petrolatums

WESTERN PENNA. (Bbls., carloads; tank car, 1 to 1.5c less.)		
Snow White.	(1)6.375–8(1)	(1)6.375–8(1)
Lily White...	(1)6.125–7.25(2)	(1)6.125–7.25(2)
Cream White.	(1)5.875–6.75(2)	(1)5.875–6.75(2)
Light Amber.	(1)4.375–5.5(1)	(1)4.375–5.5(1)
Amber	(1)4.125–5.25(1)	(1)4.125–5.25(1)
Red	(1)4.5–5.125(1)	(1)4.5–5.125(1)

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Atlantic & Gulf Coasts

Prices are of refiners, FOB their refineries & tanker terminals, and of tanker terminal operators, FOB their terminals. Ships' bunkers prices are exclusive of lighterage. **Prices in effect Nov. 8.**

District	78-78.5 Oct. Prem. Gasoline**	78-78.5 Oct. Prem. Gasoline†	78-78.5 Oct. Prem. Gasoline††	74-76 Oct. Reg. Gasoline**	74-76 Oct. Reg. Gasoline†
N. Y. Harbor	....	(1)11.5-13.4(1)	....	....	(1)10.5-12(1)
do barges	....	(1)11.4-13.3(1)	....	....	(1)10.4-11.9(1)
Albany	....	(1)13.25-13.85(1)	13.5(1)	....	(5)12-12.3(1)
Baltimore	....	(1)11-13(1)	(1)12.2-12.75(1)	....	(1)10-12(1)
do barges	....	10.9(1)	12.65(1)	....	(1)9.9-11.4(1)
Baton Rouge	10.8(1)	....	....	9.8(1)	....
do barges	10.8(1)	....	....	9.8(1)	....
Boston	....	(1)11.5-13.8(2)	13.5(1)	....	(1)10.5-12.3(2)
Charleston	....	(1)11.1-12.99(1)	11.65(1)	....	(1)10.1-10.99(1)
Corpus Christi	....	(1)12-13(1)	....	....	11(2)
do barges	....	....	....	....	....
Houston	(1)12-13(1)	(1)12-13.15(1)	....	(2)11-12.5(1)	(2)11-12.5(1)
do barges	....	(1)12.75-13(1)	12.75(1)	....	(1)11-11.75(1)
Jacksonville	....	(3)12.3-13.75(1)	12.3(1)	....	(5)11.3-12.25(1)
Miami	....	(3)12.3-12.75(1)	12.3(1)	....	(4)11.3-11.75(1)
Mobile	....	12.3(2)	12.3(1)	....	11.3(3)
New Haven	....	13.7(2)	13.7(1)	....	12.2(3)
New Orleans	(1)11-12(1)	12(1)	....	(1)10-11(1)	11(1)
do barges	(1)11-12(1)	12(1)	....	(1)10-11(1)	11(1)
Norfolk	....	(1)11.3-12.25(1)	11.8(1)	....	(1)10.3-11(1)
Pensacola	....	12.4(1)	....	....	11.4(1)
Philadelphia	....	(1)12.4-12.9(1)	(1)12.4-12.75(1)	....	(2)11.5-11.9(3)
do barges	....	(1)12.65-12.8(1)	12.65(1)	....	(1)11.4-11.8(1)
Port Everglades	....	(3)12.3-12.75(1)	12.3(1)	....	(4)11.3-11.75(1)
Portland	....	(1)13.25-13.5(1)	13.5(1)	....	12(4)
Providence	....	(1)13.25-13.5(1)	13.5(1)	....	(4)12-12.1(1)
Savannah	....	(2)12.3-12.75(2)	12.3(1)	....	(5)11.3-12.05(1)
Tampa	....	(3)12.3-12.75(2)	12.3(1)	....	(5)11.3-11.75(1)
Wilmington N. C.	....	(2)11.35-12.25(1)	11.85(1)	....	(1)10.35-11(1)

District	Kerosine—No. 1 Fuel	No. 2 Fuel	Gas-House Gas Oil	No. 5 Fuel (0-10 p.t.)	No. 5 Fuel (15-60 p.t.)
N.Y. Harbor.	(7)10.3-11.65(1)	(9)9.4-10.1(1)	(1)9.5-10(1)	(3)$3.38-3.80(1)	$3.20(1)
do barges	.(6)10.2-11.5(1)	(7)9.3-10(1)	....	(3)$3.35-3.84(1)	3.17(1)
Albany	.....(1)10.4-10.75(1)	(1)9.4-9.85(1)	10.2(1)	4.12(1)	....
Baltimore	...(9)10.3-10.5(2)	9.4(12)	9.5(1)	....	3.20(1)
do barges	10.2(3)	9.3(4)	....	....	3.17(1)
Baton Rouge.	9.7(1)	8.7(1)	....	....	....
do barges	9.7(1)	8.7(1)	....	....	....
Boston	.....(1)10.4-10.8(12)	(1)9.5-9.8(11)	10.2(1)	(1)3.65-3.655(1)	3.623(1)
Charleston	...(1)10.1-11.35(1)	(2)9.4-10.9(1)	....	....	....
Corpus Christi	....	....	....	....	....
do barges	....	....	....	....	....
Houston	.....(1)9.125-10.25(2)	(3)9-9.5(1)	....	....	....
do barges	.(1)9.75-11(1)	(1)9-10(1)	....	$3.10(1)	....
Jacksonville	.(7)10.7-11.375(1)	(6)10.3-10.8(1)	....	....	....
Miami	.....(5)10.7-10.85(1)	10.3(4)	....	....	....
Mobile	10.7(4)	10.3(1)	....	....	....
New Haven	..(1)10.4-10.7(7)	(1)9.5-9.8(6)	....	....	....
New Orleans.	(2)9.7-11(1)	(1)8.85-9.5(1)	....	....	....
do barges	.(1)9.7-11(1)	(2)9-9.5(1)	....	....	....
Norfolk	.....(5)10.3-10.7(1)	(4)9.3-9.8(1)	9.4(1)	....	(1)3.14-3.17(1)
Pensacola	...(1)10.5-10.8(1)	....	....	....	....
Philadelphia	.(8)10.3-10.5(1)	(8)9.4-9.6(1)	9.8(1)	....	(2)3.29-3.52(2)
do barges	10.2(5)	9.3(5)	....	....	....
Pt. Everglades	(6)10.7-10.85(1)	10.3(4)	....	....	....
Portland	....(1)10.4-10.9(6)	(1)9.5-9.9(6)	10.3(1)	....	....
Providence	..(1)10.4-10.8(7)	(1)9.4-9.8(7)	10.2(1)	....	$3.593(1)
Savannah	....(6)10.7-10.85(1)	10.3(4)	....	....	....
Tampa	.....(8)10.7-10.85(1)	10.3(7)	....	....	....
Wilmington, N. C.	.....(6)10.2-10.7(1)	(6)9.5-9.8(1)	....	....	....

District	No. 6 Fuel	No. 6 Fuel Barges	Bunker C Fuel, Ships' Bunkers	Diesel oil, Ships' Bunkers	Diesel Oil Shore Plants
N. Y. Harbor.	(3)$3.03-3.27(1)	(3)$3.00-3.27(1)	(2)$3.00-3.05(1)	(1)$3.91-4.10(1)	(1)9.7-10(1)
Albany	3.249(1)	3.249(1)	3.249(1)	....	(1)9.7-10.2(2)
Baltimore	....(3)$3.03-3.07(1)	(3)$3.00-3.04(1)	(2)3.00-3.04(1)	4.04(2)	(2)9.7-9.8(3)
Baton Rouge	2.54(1)	2.51(1)	2.51(1)	3.65(1)	9.1(1)
Boston	.....(1)3.055-3.315(1)	(1)3.025-3.315(1)	(1)3.025-3.095(1)	4.08(1)	(1)9.9-10.2(4)
Charleston	... 2.96(2)	2.93(2)	2.93(2)	3.95(1)	9.4(2)
Corpus Christi.	2.56(1)	2.53(1)	(1)2.53-2.55(1)	(1)3.15-3.89(1)	....
Houston	.....(2)2.50-2.58(2)	(2)$2.51-3.35(1)	(1)2.50-2.53(1)	3.65(1)	(4)9.25-9.5(2)
Jacksonville	..(4)2.99-3.03(1)	(4)2.96-3.00(1)	(4)2.96-3.00(1)	4.42(2)	10.3(5)
Miami	....	....	....	....	....
Mobile	....	....	....	....	....
New Haven	.. 3.035(2)	3.035(2)	3.035(2)	....	(2)9.9-10.2(3)
New Orleans	.(3)2.54-2.58(1)	(3)2.51-2.55(1)	(3)2.51-2.55(1)	(1)3.40-3.89(1)	(2)9.4-9.425(1)
Norfolk	.....(2)3.00-3.04(1)	(2)2.97-3.07(1)	(2)2.97-3.01(1)	4.06(1)	(2)9.6-9.7(1)
Pensacola	....	....	....	....	....
Philadelphia	.(2)3.03-3.27(2)	(2)3.00-3.27(2)	(2)$3.00-3.27(1)	(1)$4.07-4.12(1)	(2)9.7-9.8(4)
Port Everglades	2.94(1)	2.91(1)	2.91(1)	4.32(1)	....
Portland	.....(1)3.095-3.115(1)	(1)3.085-3.095(1)	(1)3.085-3.095(1)	....	(1)9.8-10.3(1)
Providence	...(1)3.045-3.085(1)	(1)3.055-3.065(1)	(1)2.995-3.065(1)	....	10.2(2)
Savannah	....(1)2.99-3.03(1)	(2)$2.96-3.00(1)	(2)$2.96-3.00(1)	4.45(1)	10.3(3)
Tampa	.....(2)2.87-2.93(1)	(3)2.84-2.90(1)	(3)2.84-2.90(1)	4.32(2)	10.3(5)
Wilmington, N. C.	....	....	....	3.96(1)	....

** Motor Method & Research octane ratings are approximately same. † Research octane rating is minimum of 5 points above Motor Method rating. †† Research octane rating is minimum of 10 points above Motor Method rating.

(Additional Gulf Coast prices on page 68)

Lake Port Terminal Prices

Prices in Effect Nov. 8

	Buffalo	Cleveland	Detroit	Toledo
78-78.5 Oct. Ethyl	.....	.....	.....	.....
74-76 Oct.	(2)12.8–13.1(1)	.....	.....	.....
Kerosine	(2)11.9–12.8(1)	.....	.....	12.4(1)
Diesel Fuel	11(1)	13(1)	.....	(1)11.3–13(1)
No. 1 Fuel	.....	13.75(1)	11.8(1)	(1)11.7–13.75(1)
No. 2 Fuel	(1)10.9–11.75(1)	.....	11.35(1)	(1)10.7–11.5(1)
No. 3 Fuel	.....	13(1)	11.1(1)	(1)11–13(1)
No. 5 Fuel	.....	10.15(1)	10.45(1)	(1)9–9.25(1)
No. 6 Fuel	(1)8.7–9.7(1)	9.75(1)	9.6(1)	8.75(3)

Refinery & Terminal Prices (Continued)

NPN Gasoline Index

	Dealer T.W.	Tank Car
	Cents Per Gal.	
Nov. 8	14.59	11.25
Month ago	14.59	11.24
Year ago	13.16	9.46

Dealer index is an average of "undivided" dealer prices, ex-tax, in 50 cities.

Tank car index is weighted average of following wholesale markets for regular-grade gasoline, FOB refineries or terminals: Okla., Mid-Western, W. Penna., Calif., N. Y. Harbor, Philadelphia, Jacksonville, Boston and Gulf Coast.

Mid-Continent Lubes

(At Gulf; in packages, FAS, New Orleans. in bulk, FOB terminals)

Prices in Effect Nov. 8

Bright Stock	Steel Drums	Bulk
D color, Vis. at 210°		
150 vis., 0-10 p.p.	(1)48–50(1)	(1)38–40(1)

Wax

Melting points are AMP, 3° higher than EMP. Prices are for carload lots. Domestic prices are FOB refinery; scale in bags or bbls.; fully refined, slabs loose. Export prices are FAS; scale in bags or bbls.; fully refined in bags or cartons.

Prices in Effect Nov. 8

Crude Scale	New Orleans Export	N.Y. Domestic	N.Y. Export
122-4 wh.	....	5.75(2)	....
124-6 wh.	6.05(1)	5.75(2)	(4)6-6.25(1)
Fully Refined:			
123-5	(1)6.9-7.05(1)		...
125-7 .. 8(1)	(1)6.96-7.15(1)	(1)7.7-7.95(1)	
128-30 . 8.1(1)	(1)6.96-7.25(1)	(1)7.7-8.05(1)	
130-32 . 8.3(1)	(1)7.3-7.5(1)	(1)8-8.25(1)	
133-5 .. 8.35(1)	(1)7.26-7.55(1)	(1)8.1-8.3(1)	
135-7 .. 8.6(1)	(1)7.6-7.8(1)	(1)8.4-8.55(1)	
138-40 . 9(1)	(1)7.86-8(1)	(1)8.4-8.95(1)	
143-5 .. 10.1(1)	(1)8.63-9.1(1)	(1)9.5-10.05(1)	
148-50 . 12.5(1)	11.5(1)	12.45(1)	

Naphtha

Prices in Effect Nov. 8

	V.M.&P. Naphtha	Mineral Spirits
New York Harbor	15(4)	14(5)
Philadelphia	15(4)	14(5)
Baltimore	....	13.5(4)
Boston	15.5(4)	14.5(5)
Providence	....	14.5(3)

Export Prices

Prices in Effect Nov. 8

	Mexican Gulf Ports U. S. Dollars per Bbl. Bunker C (Ships' Bunkers)	Diesel (Ships' Bunkers)
Tampico	$2.65	$3.75
Veracruz	2.65	....
Minatitlan	2.65	3.75
	Pacific Coast	
Guaymas	$3.16	$3.95
Manzanillo	3.16	3.66
Salina Cruz	3.16	3.50

Pacific Coast

Prices in Effect Nov. 8

(In Ships' Bunkers, Diesel Fuel or Deep Tank Lots) (P.S. 200)		Bunker C Fuel (P.S. 400)
San Pedro, Calif.	$3.18(4)	$2.10(4)
San Francisco	3.39(4)	(3)2.15–2.20(1)
Portland, Ore.	3.60(4)	2.40(4)
Seattle, Wash.	3.60(4)	2.40(4)

SPECIAL NOTICE

Owing to present short supply of many products, some sellers are withholding public quotations or the posting of firm prices on some products but are giving OILGRAM the prices they otherwise would quote to trade in general and which today they confine mostly to their regular customers only.

Gulf Coast—Cargoes, Domestic & Export, All Ports

Cargo prices are FOB ship at Gulf, minimum of 20,000 bbls., and are by refiners only to other refiners, export agents, or tanker terminal operators. The figure in parentheses after each price indicates the number of companies quoting that price. **Prices in Effect Nov. 8.**

Aviation Gasoline

Grade 115/145 (AN-F-48)	18(1)
Grade 100/130 (AN-F-48)	16.25(2)
Grade 91/98 (AN-F-48)	14.75(1)–15.25(1)
Grade 80 (AN-F-48)	14.25(1)

Motor Gasoline Leaded

*78-78.5 Oct. (Premium)	11(1)–11.25(1)–11.75(1)
†78-78.5 Oct. (Premium)	11.75(1)–12(1)–12.75(1)
††78-78.5 Oct. (Premium)	12(1)–12.75(1)
*74-76 Oct. (Regular)	9(1)–10.5(2)–11(1)–12(1)–13.5(1)
†74-76 Oct. (Regular)	9(1)–11(2)–11.75(1)–12(1)–13.5(2)
70-72 Oct.	8.5(1)–10.125(1)–10.5(1)–12(1)–12.75(1)–13.5(1)

* Motor Method & Research octane ratings are approximately same.
† Research octane rating is minimum of 5 points above Motor Method rating.
†† Research octane rating is minimum of 10 points above Motor Method rating.

Kerosine & Light Fuels

41-43 kerosine	9(3)–9.75(1)–10.1(1)–11(1)
No. 2 Fuel	8(3)–9(2)–10(1)–11(1)

Diesel & Gas Oils

43-47 Diesel index	8.25(1)–10(2)
48-52 Diesel index	8.25(1)–10(1)–10.25(1)
53-57 Diesel index	8.375(2)–10.5(1)–11.5(1)

Heavy Fuels—Cargoes

No. 5 Fuel, 0–10 p.t.	$3.10(1)–$3.45(1)
Bunker C Fuel	$2.46(3)–2.50(2)–2.75(1)–$3.10(1)

Heavy Fuels—Ships' Bunkers (ex lighterage)

Below 28 grav. heavy Diesel	$3.15(1)–$3.40(2)–$3.90(1)
28 grav. & above Diesel	$3.55(1)–3.65(2)–3.89(1)–4.10(1)
Bunker C Fuel	$2.50(1)–2.51(5)–2.53(2)–2.55(3)–2.80(1)–$3.10(1)

Aviation Gasoline & Jet Propulsion Fuel

Prices in Effect Nov. 8

(Prices are for tank cars, barge or truck transport lots; aviation gasolines meet Specification AN-F-48, unless otherwise noted, jet fuel meets AN-F-32.)

District	Aviation Gasoline Grade 115/145	Grade 100/130	Grade 91/98	Grade 80	Jet Fuel (JP-1-2)
New York, N. Y.	19.85(1)	18.1(3)	(2)16.6-16.7(1)	(1)15.7-15.85(1)	....
Boston, Mass. ..	....	18.2(1)	16.7(1)	....	....
Portland, Me. ..	....	....	....	17.8(1)	....
Phila., Pa.	....	18.1(1)	16.6(1)	....	....
Baltimore, Md. .	....	18.1(2)	(2)16.6-16.7(1)	(1)15.7-15.85(1)	....
Norfolk, Va.	....	18.1(2)	16.6(2)	15.85(1)	....
Charleston, S. C.	....	18(2)	16.5(2)	15.75(1)	....
New Orleans, La. (Baton Rouge)	18.75(1)	17(2)	15.5(2)	14.75(1)	10.45(1)
Houston, Tex. ..	18.75(2)	17(3)	15.5(3)	14.75(2)	10.5(1)

Tanker Market Report

Supplied by Dietze Inc., New York, N. Y., oil & ship brokers & tank steamer chartering agents. USMC rate reference for purpose of this report is rate that was in effect June 30, 1948, for vessels over 14,000 TDW. The rates shown under the headings "Last Paid" & "Owners Ask" refer to vessels over 14,000 TDW. All rates shown are on basis of tons of 2240 pounds & in dollars per ton. Approximate rates in cents per bbl. may be determined by dividing per-ton rate by following conversion factors: gasoline, 8.7; kerosine, 7.9; No. 2 fuel, 7.5; 30 gravity crude, 7.3; No. 5 fuel, 6.9; bunker "C", 6.5.

		LAST PAID	OWNERS ASK
Gulf	New York	USMC plus 5% ($2.9925)	USMC plus 10/15%
N.W.I.	U.K./Continent	USMC plus 10% ($7.205)	USMC plus 10%
Ras Tanura	North Hatteras	Flat USMC ($12.70)	USMC plus 5%

UNITED STATES FLAG CHARTERS

VESSEL	TDW	CARGO	TRADE	RATE	LIFTING
WESTPORT	9,500	Dirty	USGulf/USNH	Flat USMC	Late Nov.
HARVEY W. WILEY	9,500	Dirty	USGulf/USNH	Flat USMC	Late Nov.
R. E. WILSON	15,500	Dirty	USGulf or Carib./USNH	USMC less 5%	Early Nov.
MICHAEL	15,000	Clean	Carib./Denmark	USMC plus 10%	Late Nov.
FORT MIMS	15,500	Dirty	Carib./USNH	Flat USMC	Nov.
EVISTAR	9,600	Dirty	USGulf/USNH (Two consecs.)	USMC plus 4%	Mid Nov.
R. E. WILSON	15,500	Dirty	USGulf or Carib./USNH	Flat USMC	Late Nov.
STONY CREEK	15,500	Dirty	Venezuela/USNH	Flat USMC	Nov.
FOUR LAKES	15,500	Dirty	USGulf or Carib./USNH	USMC plus 5%	Mid Nov.
FORT CLATSOP	15,500	Clean	USGulf/USNH	USMC plus 5%	Mid Nov.
MONTEBELLO HILLS	15,500	Dirty	USGulf/USNH	Flat USMC	1st Half Nov.
BIDWELL	10,000	Clean	USGulf/USNH	USMC plus 5%	Mid Nov.
AMERICAN TRADER	15,000	Dirty	Persian Gulf/USNH	Flat USMC	Early Dec.
HENRY L. ELLSWORTH	9,500	Dirty	USGulf/USNH	USMC plus 5%	Nov.

FOREIGN FLAG CHARTERS

DRAPER'S MEADOWS	15,000	Dirty	Persian Gulf/Guam	Flat USMC	Nov.
IRVINGDALE	9,500	Dirty	Carib./USNH	Flat USMC	Nov.
AUSTANGER	14,000	Clean	Aruba/Denmark	$6.50	Nov.
BEAUREGARD	13,000	Dirty	Caribbean/Norway	M.O.T.	Nov.
BEAUFIGHTER	13,000	Clean	Caribbean/Norway	M.O.T.	Nov.
BEAU	14,000	Dirty	Caribbean/Norway	M.O.T.	Dec.
HAVFRU	11,500	Dirty	Caribbean/Stockholm	S. Kr. 30.-	Nov./Dec.
DRAFN	11,500	Dirty	Caribbean/Stockholm	S. Kr. 32.-	Nov.
NYHOLM	8,500	Clean	Caribbean/Denmark	M.O.T. plus 20%	Nov.
NORDANGER	13,000	Dirty	Caribbean/U.K. Cont.	M.O.T. less 15%	Nov.
KATY	9,500	Dirty	Caribbean/U.K. Cont.	M.O.T. less 15%	Nov.
HERBRAND	14,750		Three yrs. T/C followed by 16,000 Newbuilding five yrs.	21/-	Dec. 1948
				20/-	1951/52
JULIAN	13,490		Twelve yrs. T/C option subst. 16300 N.B.	$2.75	Sept. 1950

Tank Wagon Prices

Commercial or consumer tank car, tank wagon, dealer and service station prices for gasoline do not include taxes; they do, however, include inspection fees as shown in next column. Gasoline taxes, shown in separate column, include 1.5c federal, and state taxes; also city and county taxes as indicated in footnotes. Kerosine tank wagon prices also do not include taxes; kerosine taxes where levied are indicated in footnotes. Dealer discounts are shown in footnotes. These prices in effect Nov. 8, 1948, as posted by principal marketing companies at their headquarters offices, but subject to later correction.

Inspection fees per gal., included in both gasoline and kerosine prices, unless otherwise specified, are as follows:

Ala. 1/40c on gasoline; Ark. 1/20c; Fla. 1/8c; Ill. 3/100c; Ind. 2/25c; Kans. 1/50c; La. 1/32c; Minn. 5/200c; Neb. 2/100c; Nev. 1/20c; N. C. 1/4c; N. D. 1/20c; Okla. 2/25c; S. C. 1/8c; S. D. 1/40c; Tenn. 2/5c; and Wisc. 3/100c.

Kerosine inspection fees only: Ala. 1/2c; Iowa 1/50c; Mich. 1/5c.

ATLANTIC REFINING

	Atlantic White Flash (Regular Grade) Commercial T.W.	Dealer T.W.	Gasoline Taxes	Kerosine T.W.
Philadelphia, Pa.	12.9	12.9	5.5	13.5
Pittsburgh	13.8	13.8	5.5	14.4
Allentown	13.5	13.5	5.5	14.1
Erie	13.8	13.8	5.5	14.4
Scranton	13.8	13.8	5.5	14.4
Altoona	13.8	13.8	5.5	14.4
Emporium	13.8	13.8	5.5	14.4
Indiana	13.8	13.8	5.5	14.4
Uniontown	13.8	13.8	5.5	14.4
Harrisburg	13.5	13.5	5.5	14.1
Williamsport	13.8	13.8	5.5	14.4
Dover, Del.	13.5	13.5	5.5	14.1
Wilmington	12.9	12.9	5.5	13.5
Boston, Mass.	13.2	13.2	4.5	....
Springfield	13.8	13.8	4.5	....
Worcester	13.4	13.4	4.5	....
Fall River	13.2	13.2	4.5	....
Hartford, Conn.	13.8	13.8	5.5	....
New Haven	13.5	13.5	5.5	....
Providence, R. I.	13.2	13.2	5.5	....
Atlantic City, N. J.	....	12.4	4.5	13.3
Camden	....	12.4	4.5	13.3
Trenton	....	12.4	4.5	13.3
Baltimore, Md.	....	12.2	6.5	13.1
Hagerstown	....	13.0	6.5	13.9
Richmond, Va.	....	12.5	7.5	13.7
Wilmington, N. C.	....	12.7	7.5	13.5
Brunswick, Ga.	....	14.5	7.5	14.3
Jacksonville, Fla.	....	13.9	8.5	13.7

	Mineral Spirits T.W.	V.M.&P. T.W.
Philadelphia, Pa.	15.00	16.5
Lancaster, Pa.	16.0	17.5
Pittsburgh, Pa.	17.5	18.5

Fuel Oils—T.W.	1	2	5	6
Phila., Pa.	13.5	12.0	8.89	8.12
Pittsburgh	....	12.9	....	....
Allentown	14.1	12.6	....	....
Wilmington, Del.	13.5	12.0	....	....
Dover	....	12.6	....	....
Springfield, Mass.	....	13.2	....	....
Worcester	....	12.9	....	....
Hartford, Conn.	....	12.9	....	....

Taxes:

Brunswick, Ga., kerosine price does not include 1c state tax.

Notes:

Kerosine—Thru Penna. & Del., add 2c per gal. for t.w. deliveries of less than 25 gals. at one time.

Mineral Spirits prices also apply to Stoddard Solvent; V.M.&P. prices also apply to Light Cleaners Naphtha.

CONT'L OIL

(N. B. Prices are Continental's "normal" prices. Current selling prices may be lower than "normal" because of local competition.)

	Conoco N-tane (regular) Tank	Demand (3rd Grade) Wagon	Gasoline Taxes	Kerosine T.W.
Denver, Col.	14.8	13.8	7.5	15.9
Grand Junc.	17.2	16.2	7.5	17.3
Pueblo	15.8	14.8	7.5	15.5
Casper, Wyo.	15.7	14.7	6.5	14.9
Cheyenne	15.8	14.8	6.5	16.4
Billings, Mont.	17.0	16.0	6.5	16.2
Butte	18.0	17.0	6.5	17.9
Great Falls	17.0	16.0	6.5	17.9
Helena	17.5	16.5	6.5	17.9
Salt Lake, U.	16.4	15.4	5.5	16.5
Twin Falls, Ida.	19.1	18.1	7.5	19.2
Albuquer., N. M.	15.5	14.5	7.0	14.9
Roswell	14.8	13.8	7.0	14.2
Santa Fe	15.8	14.8	7.5	15.2
Muskogee, Okla.	14.0	13.0	7.0	12.9
Oklahoma City	14.0	13.0	7.0	12.9
Tulsa	14.0	13.0	7.0	12.9

Taxes:

Gasoline tax column includes these city taxes: Albuquerque & Roswell, 0.5c; Santa Fe, 1c; Cheyenne, 1c; Casper, 1c.

Notes:

T.W. prices are to consumers & dealers.

HUMBLE OIL

	Humble (Regular) Tank Wagon	Retail	Gasoline Taxes
Dallas, Tex.	13.0	18	5.5
Ft. Worth	13.0	18	5.5
Houston	13.0	18	5.5
San Antonio	13.0	18.0	5.5

	Kerosine Tank Wagon	Retail
Dallas, Tex.	12.5	17.0
Ft. Worth	12.5	17.0
Houston	12.5	17.0
San Antonio	12.5	17.0

Notes:

T.W. prices are to all classes of dealers and consumers.

IMPERIAL OIL

	Esso Gasoline (Regular Grade) Gasoline T.W.	Gasoline Taxes	Kerosine T.W.
Hamilton, Ont.	21.0	11.0	23.0
Toronto	21.0	11.0	23.0
Brandon, Man.	27.2	9.0	29.2
Winnipeg	25.4	9.0	27.4
Regina, Sask.	26.0	10.0	28.0
Saskatoon	28.8	10.0	30.8
Edmonton, Alta.	23.1	9.0	25.1
Calgary	22.2	9.0	24.2
Vancouver, B. C.	19.5	10.0	24.0
Montreal, Que.	21.0	11.0	23.0
St. John, N. B.	18.0	13.0	22.0
Halifax, N. S.	18.0	13.0	22.0

Taxes:

Gasoline taxes are provincial taxes.

Notes:

Prices are per imperial gal. which is 1.2 U. S. gals. T.W. prices are to divided & undivided dealers.

TEXAS CO.

	Fire-Chief Gasoline (Regular Grade) Dealer T.W.	Gasoline Taxes	Kerosine Dealer T.W.
Dallas, Tex.	13.0	5.5	12.50
Fort Worth	13.0	5.5	12.50
Wichita Falls	13.0	5.5	12.50
Amarillo	13.0	5.5	12.50
Tyler	13.0	5.5	12.50
El Paso	15.0	5.5	12.85
San Angelo	13.0	5.5	12.50
Waco	13.0	5.5	12.50
Austin	13.0	5.5	12.50
Houston	13.0	5.5	12.50
San Antonio	13.0	5.5	12.50
Port Arthur	13.0	5.5	12.50

Notes:

Dealer t.w. prices apply also to all classes of consumers with minimum delivery of 50 gals.

CALIFORNIA STANDARD

	CHEVRON (Regular) T.T.	Retail	Av. 80 T.T.	Gasoline Taxes	Kerosine T.T.
San Fran., Cal.	13.9	17.9	17.4	6.0	15.4
Los Angeles	13.4	17.4	16.9	6.0	14.9
Fresno	15.2	19.2	18.7	6.0	16.7
Phoenix, Ariz.	16.6	20.6	20.1	6.5	18.1
Reno, Nev.	16.4	20.4	19.9	7.0	17.9
Portland, Ore.	14.5	18.5	18.0	6.5	17.5
Seattle, Wash.	14.5	18.5	18.0	6.5	17.5
Spokane	17.3	21.3	20.8	6.5	21.3
Tacoma	14.5	18.5	18.0	6.5	17.5
Boise, Idaho	18.9	....	22.4	7.5	22.2
Salt Lake, U.	16.4	....	19.4	5.5	16.5
Honolulu, T. H., Fairbanks, Alaska	14.9	19.4	18.4	7.5	16.4
	26.2	30.2	29.7	3.5	33.7
Juneau	15.9	19.9	19.4	3.5	18.9

Taxes:

Boise 7.5c tax applies to motor fuel only; avgas taxes are 1.5c federal, 2.5c state. Reno 7c tax includes 1.5c county tax. Honolulu 7.5c tax applies to motor fuel only; avgas taxes are 1.5c federal, 5c territorial; Hawaiian gross income tax also is excluded as follows: from

California Standard (Cont.)

retail price 0.6c per gal., & from TT prices 1% to resellers, 2.5% to consumers.

Notes:

Resale & Commercial Gasoline: T.C. prices for Chevron (regular) are 0.25c per gal. below posted net tank truck prices; Pearl Oil (kerosine) T.C. prices, 3c per gal. below posted net tank truck prices.

Prices for Chevron Supreme (Ethyl) are 1.5c above Chevron (regular). Retail prices for Chevron Supreme are 4.5c above Chevron Supreme tank truck prices except at Honolulu where spread is 5.0c. Prices for Chevron Aviation 91 are 2c above Chevron Aviation 80; for Chevron Aviation 100, 5c above Chevron Aviation 80; for Chevron Aviation 115, 8c above Chevron Aviation 80.

ESSO STANDARD

	Esso (Regular Grade) Consumer Tank Wagon	Dealer T.W.	Gasoline Taxes	Kerosine T.W.
Atlantic City, N. J.	12.3	12.3	4.5	13.3
Newark	12.3	12.3	4.5	13.3
Baltimore, Md.	12.2	12.2	6.5	13.1
Cumberland	13.4	13.4	6.5	14.5
Washington, D. C.	12.6	12.6	5.5	13.5
Danville, Va.	13.2	13.2	7.5	14.4
Petersburg	12.8	12.8	7.5	14.0
Norfolk	12.1	12.1	7.5	13.4
Richmond	12.5	12.5	7.5	13.7
Roanoke	14.1	14.1	7.5	15.3
Charleston, W. Va.	13.9	13.9	6.5	15.2
Fairmont	13.8	13.8	6.5	15.5
Parkersburg	13.8	13.8	6.5	13.8
Wheeling	13.5	13.5	6.5	16.4
Charlotte, N. C.	13.7	13.7	7.5	14.1
Hickory	13.9	13.9	7.5	14.3
Mt. Airy	14.2	14.2	7.5	14.6
Raleigh	13.8	13.8	7.5	14.8
Salisbury	13.4	13.4	7.5	13.8
Charleston, S. C.	12.6	12.6	7.5	....
Columbia	14.0	14.0	7.5	....
Spartanburg	13.2	13.2	7.5	....
New Orleans, La.	12.4	12.4	10.5	12.9
Baton Rouge	12.1	12.1	10.5	12.5
Alexandria	13.4	13.4	10.5	14.0
Lake Charles	12.2	12.2	10.5	13.3
Shreveport	13.7	13.7	10.5	13.0
New Iberia	12.5	12.5	10.5	12.9
Knoxville, Tenn.	13.5	13.5	8.5	13.9
Memphis	13.2	13.2	8.5	13.7
Chattanooga	13.3	13.3	8.5	13.7
Nashville	13.8	13.8	8.5	14.3
Bristol	14.6	14.6	8.5	15.0
Little Rock, Ark.	13.8	13.8	8.0	14.3

	Mineral Spirits T.W.	V.M.&P. T.W.
Newark, N. J.	15.0	16.5
Baltimore, Md.	17.5	....
Washington, D. C.	17.5	....

Fuel Oil—T.W.	No. 1	No. 2
Atlantic City, N. J.	13.3	12.0
Newark	13.3	12.0
Baltimore, Md.	13.1	11.9
Washington, D. C.	13.5	12.3
Norfolk, Va.	13.4	11.4
Petersburg	14.0	12.1
Richmond	13.7	11.8
Charlotte, N. C.	14.1	12.4
Hickory	14.3	12.7
Raleigh	14.8	13.3
Charleston, S. C.	....	11.8
Columbia	....	12.9
Spartanburg	....	12.3

Taxes: Louisiana kerosine prices do not include 1c state tax.

Naphtha—Newark t.w. prices are for deliveries of 200 gals. or more; less than 200 gals., 0.5c over posted t.w. prices; steel barrel deliveries, 2c over posted t.w. prices. Baltimore & Washington prices are for t.w. deliveries of 25-99 gals., no discounts.

Notes:

Effective Dec. 22, minimum retail resale price of 16.3c for Esso Gasoline posted throughout New Jersey.

Tank Wagon Prices (Continued)

SOCONY VACUUM

	Gasoline Taxes	Mobilgas Aircraft Grade 80 T.W.	Mobilgas Aircraft Grade 91 T.W.	Mobilgas Aircraft Grade 100 T.W.	Mobilgas (Regular Grade) T.C.	Com. Cons. T.W.	Dir. T.W.	Mobil Kerosine T.C.	Yard	T.W.	Mobilfuel Diesel T.C.	T.W.	MOBILHEAT (No. 2 Fuel) T.C.	Yard	T.W.	S/V No. 5 Fuel T.W.	S/V No. 6 Fuel T.W.
New York City:																	
Manhattan	5.5	....	19.5	....	....	13.3	13.3	....	....	14.5	....	13.3	....	....	12.9	11.55	8.16
Bronx	5.5	....	19.5	....	....	13.3	13.3	....	....	14.5	....	13.3	....	....	12.9	11.55	8.16
Kings	5.5	....	19.5	....	....	13.3	13.3	10.7	11.4	14.5	....	13.3	9.7	10.2	12.9	11.55	8.16
Queens	5.5	....	19.5	....	....	13.3	13.3	....	....	14.5	....	13.3	....	....	12.9	11.55	8.16
Richmond	5.5	....	18.9	....	....	13.2	13.2	10.6	10.9	13.8	....	13.0	9.6	10.0	12.6	11.55	....
Albany, N. Y.	5.5	20.3	21.3	23.8	12.0	13.1	13.1	10.7	10.9	13.7	10.2	12.6	9.8	10.0	12.2	10.7	8.6
Binghamton	5.5	....	....	....	13.7	14.6	14.6	12.8	13.0	15.8	....	14.3	11.7	11.9	13.9	....	....
Buffalo	5.5	20.0	21.0	23.25	12.8	13.8	13.8	11.9	12.1	15.1	11.3	14.1	10.9	11.1	13.7	....	....
Jamestown	5.5	20.4	....	....	13.3	14.4	14.4	12.1	....	15.5	....	14.7	11.8	....	14.3	....	....
Mt. Vernon	5.5	....	....	....	....	13.8	13.8	....	11.5	14.4	....	13.2	....	10.3	12.8	11.75	....
Plattsburg	5.5	....	....	....	....	14.3	14.3	12.0	12.2	15.2	....	....	11.1	11.3	13.5	....	....
Rochester	5.5	19.9	20.9	....	13.3	14.3	14.3	12.1	12.1	15.3	....	13.8	11.0	11.0	13.4	....	....
Syracuse	5.5	20.7	21.7	....	13.0	13.9	13.9	12.4	12.6	15.6	11.5	14.0	11.1	11.3	13.6	....	....
Bridgeport, Conn.	5.5	....	....	....	....	13.3	13.3	10.7	10.9	....	....	....	9.8	10.0	12.3	....	....
Danbury	5.5	....	....	....	....	14.1	14.1	....	12.1	....	....	....	....	11.2	13.2	....	....
Hartford	5.5	....	....	....	12.4	13.7	13.7	11.4	11.6	....	10.8	13.3	10.4	10.6	12.9	....	....
New Haven	5.5	19.5	....	....	12.2	13.4	13.4	10.7	10.9	....	10.2	12.7	9.8	10.0	12.3	....	....
Bangor, Me.	7.5	24.3	....	....	12.5	14.0	14.0	11.7	....	15.0	11.1	13.3	10.7	....	12.9	....	....
Portland	7.5	21.9	22.9	....	12.0	13.2	13.2	10.9	....	14.2	10.3	12.7	9.9	....	12.3	....	....
Boston, Mass.	4.5	17.2	18.2	20.45	12.0	13.1	13.1	10.8	....	14.3	10.2	13.0	9.8	....	12.6	$4.123	$3.431
Concord, N. H.	5.5	....	....	....	....	14.3	14.3	....	12.7	15.9	....	13.8	....	11.4	13.4	....	....
Lancaster	5.5	....	....	....	....	15.5	15.5	....	13.6	16.5	....	15.0	....	12.5	14.6	....	....
Manchester	5.5	....	....	....	....	14.0	14.0	....	12.2	15.3	....	13.5	....	11.1	13.1	....	....
Providence, R. I.	5.5	18.3	19.3	....	12.0	13.1	13.1	10.8	11.4	14.1	10.2	12.9	9.8	10.2	12.4	$4.143	$3.265
Burlington, Vt.	6.0	....	....	....	13.0	14.1	14.1	12.0	12.2	....	11.5	13.9	11.1	11.3	13.5	....	....
Rutland	6.0	....	....	....	....	14.5	14.5	....	12.5	....	....	14.1	....	11.5	13.7	....	....

Tank Wagon Prices:	Buffalo	N. Y. City	Rochester	Syracuse	Boston	Hartford	Providence
Mineral Spirits	16.5	15.0	17.5	18.5	16.0	17.5	16.5
V.M.&P. Naphtha	18.5	16.5	19.0	25.0	17.5	19.0	18.5

Taxes: N.Y.C. prices do not include 2% city sales tax applicable to price of gasoline (ex tax).

Discounts: Diesel—0.5c per gal. for single delivery of 800 gals. or more.

Notes: Syracuse V.M.&P. price is in steel barrels. Jamestown t.c. prices are delivered prices; all other t.c. prices are FOB bulk terminals. No. 5 fuel prices at Boston & Providence are for 15-60 p.t. oil; at other points, for 0-10 p.t. oil.

OHIO STANDARD

	Gasoline Taxes	Aviation Products-Cons. T.W. Sohio Avia. 62 Clear	Esso Avia. 80 Clear	Esso Avia. 91	Esso Avia. 100	Sohio X-70 Gasoline (Regular-Grade) Consumer T.W.	Resellers	S.S.	Naphthas & Solvents—Cons. T.W. S.R. Solvent	D.C. Naphtha	V.M.&P. Naphtha	Varnolene	Sohio Solvent	Kerosine T.W.	No. 1 Sohio-Heat	No. 3 Sohio-Heat
Akron	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Canton	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Cincinnati	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Cleveland	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Columbus	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Dayton	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Lima	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Mansfield	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Marion	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Portsmouth	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Toledo	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Youngstown	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0
Zanesville	5.5	20.0	22.0	23.0	26.0	18.5	15.0	19.0	20.0	20.5	20.5	20.5	20.5	15.0	15.0	14.0

Taxes: Effective Jan. 1, 1948, hangar operators can purchase aviation gasoline less 4c per gal. State Road Tax by supporting purchase with State Tax Exemption Form A-10 to supplier.

Discounts: Esso Aviation—on contract to hangar operators and resellers, 2c off consumer t.w.
Fuel Oils—Prices shown are for t.w. & drum deliveries of 50 gals. or more; prices for deliveries of less than 50 gals. are 0.5c higher.
Naphthas—To contract consumers off t.w. prices (except Lucas County) 300 to 999 gals., 0.5c; 1000 to 2499 gals., 0.75c; 2500 to 4999 gals., 1c; 5000 or more gals., 1.5c. Lucas County: less than 50 gals., tank wagon price, 50 to 249 gals., 0.50c; 250 to 499 gals., 1c; 500 gals. or over 1.5c.

Notes: Renown (third-grade) gasoline prices are same as X-70 unless otherwise noted. S.S. prices are at company-operated stations.

INDIANA STANDARD

	Blue Crown (3rd Grade) Red Cr'n. Cons. T.W.	Red Crown (Reg. Grade) Red Cr'n. Dir. T.W.	Blue Cr'n. Dir. T.W.	Gasoline Taxes	Kerosine T.W.
Chicago, Ill.	17.7	15.7	15.2	4.5	15.9
Decatur	17.5	16.0	15.5	4.5	15.7
Joliet	17.7	16.2	15.7	4.5	15.9
Peoria	17.5	16.0	15.5	4.5	15.7
Evansville, Ind.	17.7	16.2	15.7	5.5	15.9
Indianapolis	17.9	16.4	....	5.5	16.1
South Bend	18.3	16.8	....	5.5	16.5
Detroit, Mich.	16.9	15.4	....	4.5	14.9
Grand Rapids	16.9	15.4	....	4.5	14.9
Saginaw	16.9	15.4	....	4.5	14.9
Green Bay, Wisc.	18.1	16.6	16.1	5.5	16.3
Milwaukee	17.9	16.4	15.9	5.5	16.1
La Crosse	17.8	16.3	....	5.5	16.0
Duluth, Minn.	18.0	16.5	....	5.5	16.2
Mpls.-St. Paul	17.7	16.2	15.7	5.5	15.9
Mankato	17.7	16.2	15.7	5.5	15.9
Des Moines, Ia.	17.1	15.6	15.1	5.5	15.3
Mason City	17.5	16.0	15.5	5.5	15.7
St. Louis, Mo.	17.1	15.6	15.1	4.5	15.3
Kansas City	16.4	14.9	14.4	5.0	14.6
St. Joseph	16.4	14.9	....	4.5	14.6
Fargo, N. D.	18.7	17.2	16.7	5.5	16.9
Huron, S. D.	18.2	16.7	16.2	5.5	16.4
Wichita, Kans.	14.9	14.1	13.6	5.5	13.8
Omaha, Neb.	17.1	15.6	....	6.5	15.3

Stanavo Aviation Number 80

	Cons. T.W.	Taxes
Detroit, Mich.	22.3	4.5
Fargo, N. D.	21.7	5.5
Huron, S. D.	21.2	5.5
Indianapolis, Ind.	20.9	5.5
Kansas City, Mo.	19.4	5.0

(Cont'd in next column)

(Prices are base prices before discounts)	Oleum Spirits	V.M.&P. Naphtha	Stanisol	Taxes
Chicago	19.5	20.5	20.0	4.5
Detroit	21.1	22.1	21.6	4.5
K. C., Mo.	18.2	19.2	18.7	1.5
St. Louis	18.9	19.9	19.4	1.5
Milwaukee	19.7	20.7	20.2	5.5
Minneap'ls	19.5	20.5	20.0	1.5

Fuel Oils T.W.

Chicago	Standard Heater Oil	Stanolex Furnace Oil
1-99 gals.	15.5	14.8
100-149 gals.	14.5	13.8
150 gals. & over	14.0	....
150-399 gals.	....	13.8
400 gals. & over	....	13.3

	Stanolex Fuel A	Stanolex Fuel C
1-749 gals.	10.55	9.8
750 gals. & over	9.8	9.05

Stanolex Furnace Oil

	1-99 gals.	100 gals. & over
Indianapolis	14.9	13.9
Detroit	14.3	13.3
Milwaukee	14.9	13.9
Minneapolis	14.6	13.6
St. Louis	14.0	13.0
Kansas City	13.4	12.4

Taxes:
Gasoline tax column includes these city taxes: Kansas City, 1.5c; St. Joseph, & St. Louis, 1c. Naphtha tax column includes 1.5c federal & state taxes, Iowa kerosine prices do not include 4c state tax. State sales, occupation, consumer & use taxes to be added where applicable.

STANDARD KENTUCKY

	Crown Net Dealer	Gasoline Taxes	Kerosine T.W.	Diesel Fuel Net T.W.
Covington, Ky.	14.5	8.5	15.5	15.1
Lexington	15.7	8.5	15.5	15.1
Louisville	15.0	8.5	14.8	14.4
Paducah	14.8	8.5	14.6	14.2
Jackson, Miss.	14.4	7.5	14.2	13.8
Vicksburg	13.9	7.5	13.7	13.3
Birmingham, Ala.	14.4	8.5	14.7	13.8
Mobile	13.9	9.5	14.2	13.3
Montgomery	14.5	9.5	14.8	13.9
Atlanta, Ga.	14.6	7.5	14.4	14.0
Augusta	15.1	7.5	14.9	14.5
Macon	14.6	7.5	14.4	14.0
Savannah	13.9	7.5	13.7	13.3
Jacksonville, Fla.	13.9	8.5	13.7	13.3
Miami	14.1	8.5	13.9	13.5
Pensacola	14.0	9.5	13.8	13.4
Tampa	13.9	8.5	13.7	13.3

Taxes:
Gasoline tax column includes these city & county taxes: Mobile, 2c city; Birmingham, 1c county; Montgomery, 1c city & 1c county; Pensacola, 1c city. Other taxes not included in prices: Georgia, kerosine, 1c; Montgomery, kerosine & diesel, 1c; Mississippi, kerosine & diesel, 0.5c.

Notes:
Consumer t.w. prices are same as net dealer prices.

CLASSIFIED

For Sale

FOR SALE: Small bulk plant, 2-10,000 gallon tanks, Ashland, Penna. INDEPENDENT OIL COMPANY, INC., OF PENNA., Altoona, Penna.

OIL BULK STORAGE PLANT

13—13,000 gal. tanks, size 10x48
1—20,000 gal. tank
All Horizontal
1 High Pressure Boiler—175 H.P.

WRECKERS & EXCAVATORS, INC.
58-58 Grand Ave. Maspeth, N. Y.
DAvenport 6-2800

STEEL STORAGE TANKS

Horizontal or Vertical—New. State requirements and gallonage required.

W. H. DYER CO., INC.
1859-P Railway Exchange Bldg.
St. Louis 1, Mo.

FOR SALE

STEEL STORAGE TANKS

2—8000-Gallon, Tank Car Tanks, Coiled and Non-Coiled

25—10000-Gallon, Tank Car Tanks, Coiled and Non-Coiled

4—12000-Gallon Industrial Tanks, Horizontal

1—5500-Barrel, Vertical, Bolted Type

OTHER TANKS TOO!

IRON & STEEL PRODUCTS INC.

43 years' experience

13456A S. Brainard Ave.,
Chicago 33, Illinois

"ANYTHING containing IRON or STEEL"

NEW TANK TRUCKS FOR SALE

2—Brand New 1948 Ford, 2-compartment Tank Trucks 1700 gallons each, complete with pump, meter, hose and electric hosereel. Price $7350.00 each.

USED TANK TRUCKS FOR SALE

4—Ford Tank Trucks, 2,000 gallons, (3 - compartments.) complete with hose, pump and meter. Three at $2000.00 each and one at $1750.00.

1—Chevrolet Tank Truck, 600 gallons, (3 - compartments) complete with hose, pump and meter. Price — $1300.00.

1—Ford Trailer Tank Truck, 2090 gallons, (3 - compartments) complete with hose and pump. Price — $1200.00.

1—Ford Trailer Tank Truck, 2710 gallons, (4 - compartments) complete with hose and pump. Price — $2500.00.

1—1250 Gallons (3-compartments) Tank only, Price $200.00.

All this equipment was used last Winter and was taken out of service due to replacement by new equipment. See or contact Mr. Stephenson, Phone Middletown 1663, THE RACKLIFFE OIL CO., River Road, Cromwell, Conn.

For Sale

FOR SALE: Two 5,000 barrel lap welded gasoline storage tanks. Can be easily loaded on barges. Write BOX 499 c/o National Petroleum News.

ERIE COMPUTING Gasoline Pumps, Model 77. All in good condition. Priced to move quickly BONDED OIL COMPANY, Springfield, Ohio. Phone 3-4983.

FOR SALE: 1947 Studebaker tractor and 2,555 gallon, four-compartment Fruehauf semi-trailer, vacuum brakes. Both units in A-1 condition ready to go. Price, $2,500.00. PENN-EATON MOTOR OIL, INC., P. O. Box 766, Kalamazoo, Michigan.

STEEL TANKS IN STOCK

2—74,000 BBL. 114' x 40'
2—5,000 BBL. 38' x 24'
5—1,000 BBL. 29' x 8'

LESTAN CORP.
ROSEMONT, PA.

FOR SALE

2745 gal. transport trailer, 6 compartments, 2" Neptune Meter, enclosed 10 gal. can compartment, vacuum brakes, 900 x 20 tires. Excellent condition. $1500.00.

HOWE WEISS OIL COMPANY
532 Broadway
Toledo 4, Ohio

WANT A $30,000 NET INCOME?

WELL-ESTABLISHED OIL JOBBER BUSINESS in prosperous county seat city, offered by successful retiring owner! Well-kept plant, 70,000-gallon storage capacity, full complement plant buildings, complete with all office furniture, fixtures, and equipment, 2 filling stations complete with land, buildings and equipment, other equipment for maintenance of station outlets, upright and underground tanks, 2 tractor and trailer transports (one new), 3 tank trucks, 2 stake trucks, much new equipment now being installed; company books show $16,525.01 net income first 7 months 1948 . . . everything goes, walk right in and take over: seller will give new owner helping hand! One of the best oil jobber opportunities open in America today.

UNITED FARM AGENCY
428-PN BMA Building
Kansas City 8, Missouri

Wanted to Buy

WANTED: SWEETLAND FILTER PRESS. In answering state size, price and availability. Box 494, NPN.

WANTED TO BUY: Jobber or Distributor business in New York State—central or eastern part preferred. Reply BOX 493, stating all pertinent facts. All information strictly confidential.

WANT TO BUY TANKS

6—10,000 to 25,000 GAL. HORIZ.
4—5,000 & 10,000 BBL. VERT.
4—55,000 to 80,000 BBL. VERT.

R. C. STANHOPE, INC.
60 E. 42nd St.
N. Y. 17, N. Y.

Position Wanted

PETROLEUM MAINTENANCE SUPERVISOR

Experienced on Bulk Plant & Retail outlet construction & Maintenance. Available December 1, 1948.

BOX 503

Agent Available

Very Active
MANUFACTURERS AGENT

Highly qualified, desires to represent refinery For Sale of semi- and fully refined Paraffin Waxes.

Territories: New York, Connecticut, possibly part of New Jersey and Mass.

BOX 501

Salesman Wanted

SALESMAN WANTED

Old established, well-known jobber requires experienced representative for Illinois (except Chicago) and or Wisconsin territory. Must have established contact with Petroleum and Industrial accounts.

BRUNS & COLLINS, INC.
1455 S. Michigan Ave,
Chicago 5, Illinois

Positions Open

OPENING FOR LUBRICATING AND OIL SALES ENGINEER with Rocky Mountain Oil Refiner and Producer. Good location and future opportunity for the right person. First reply please submit personal data as well as present employment and experience data. BOX 497.

POSITION OPEN for Personnel and Labor Relations Manager with Rocky Mountain Oil Refiner and Producer. Attractive offer for person with experience. Petroleum background preferred. First reply please give age and personal qualifications as well as experience and background. BOX 496.

WANTED

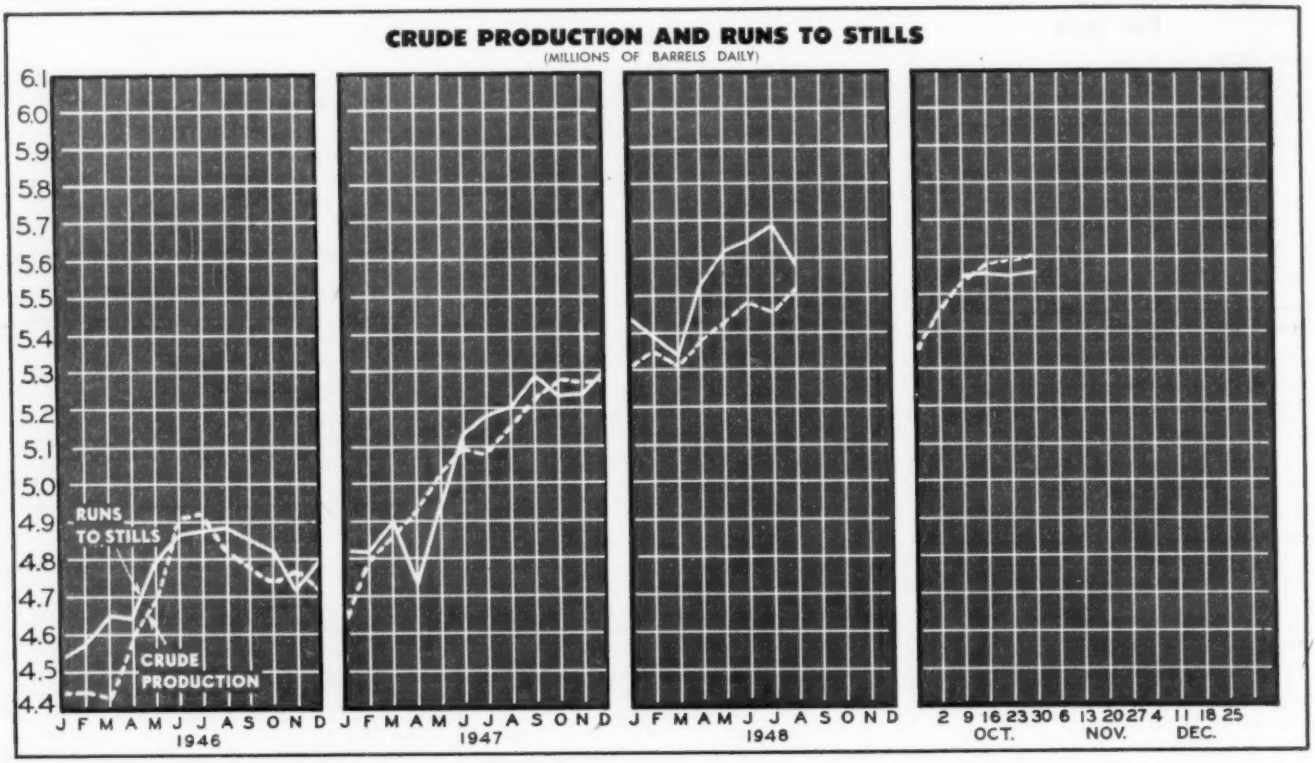
Kansas Independent Refiner has opening for young, aggressive salesman refined products tank car and tank truck delivery to Mid-western markets. Must be familiar with refining operations and equipment using products, especially diesel engines and home burners. Give age, experience and references.

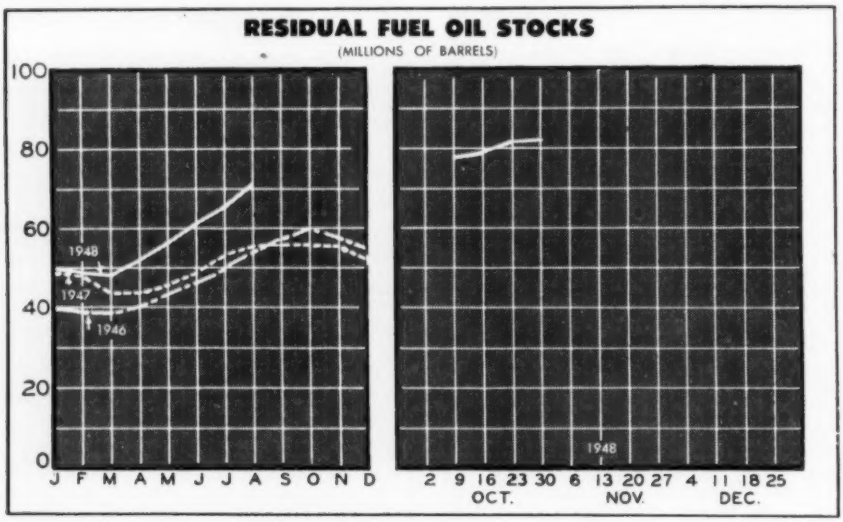
BOX 502

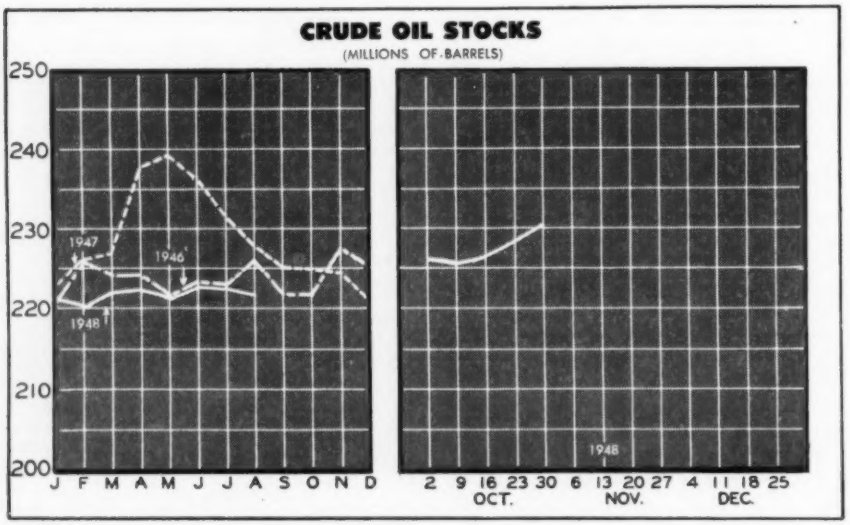
SALESMAN WANTED

Aggressive man to sell tanks, tank trucks, and all types of garage, service station, and bulk plant equipment. In Northwest Ohio and Southern Michigan territory. A hustler with good promotional ideas, needed for this job. Must have equipment sales experience or oil industry background with good references. Straight salary and expenses. Write:

J. C. Meyers, President
TOLEDO EQUIPMENT AND SUPPLY, INC.
812 Lafayette St.
Toledo, Ohio







Crude Oil Stocks

(Bureau of Mines figures in thousands of barrels)

	Oct. 23	Oct. 30	Change from Oct. 23
Pennsylvania Grade..	2,981	2,922	— 59
Other Appalachian...	1,252	1,204	— 48
Lima-Michigan	1,012	991	— 21
Illinois-Indiana	10,613	10,400	—213
Arkansas	3,268	3,208	— 60
Kansas	8,916	8,995	+ 79
Louisiana:	12,416	12,304	—112
North	2,718	2,610	—108
Gulf	9,698	9,694	— 4
Mississippi	2,505	2,689	+184
New Mexico	6,061	6,442	+381
Oklahoma	26,426	27,265	+839
Texas:	111,422	112,107	+685
East Texas	16,219	16,050	—169
West Texas	41,868	42,361	+493
Gulf Texas	28,833	29,050	+217
Other Texas.....	24,502	24,646	+144
Panhandle	4,198	4,210	+ 12
North	6,363	6,213	—150
South	4,570	4,972	+402
Other	9,371	9,251	—120
Rocky Mountain	10,361	10,479	+118
California	25,658	26,187	+529
Foreign	5,703	5,440	—263
Total gasoline bearing in U. S.	228,594	230,633	+2,039
Heavy in California	9,477	9,069	—408
Total located in Bureau of Mines East Coast District ..	13,736	12,654	—1,082

Daily Average Penna. Crude Runs to Stills

(Compiled by National Petroleum Assn., from reports of all companies refining Pennsylvania crude. Figures in bbls.)

Week Ended Oct. 30, 1948	Week Ended Oct. 23, 1948	Week Ended Nov. 1, 1947
59,326	59,334	69,239

REFINERY OPERATIONS

(American Petroleum Institute figures in thousands of barrels of 42 gallons each. Figures include reported totals plus estimate of unreported amounts and are therefore on a Bureau of Mines basis.)

Districts	Crude Runs to Stills: Daily Average Week Ended		Crude Runs to Stills: % Operated Week Ended		Gasoline Production at Refineries Inc. Natural Blended Week Ended		Kerosine Production Week Ended		Gas Oil & Dist. Fuel Oil Production Week Ended	
	Oct. 30	Oct. 23	Oct. 30	Oct. 23	Oct. 30	Oct. 23	Oct. 30	Oct. 23	Oct. 30	Oct. 23
East Coast	888	883	104.0	103.4	2,442	2,380	264	315	1,350	1,266
Appalachian (Dist. 1)	87	99	69.6	79.2	278	289	62	50	88	92
Appalachian (Dist. 2)	66	67	97.1	98.5	227	204	18	19	55	55
Ind., Ill., Ky.	933	928	91.8	91.3	3,382	3,376	444	370	907	852
Okla., Kans., Mo.	434	435	87.3	87.5	1,649	1,619	147	161	564	586
Inland Texas	226	233	76.4	78.7	967	1,020	56	72	221	200
Texas Gulf Coast	1,427	1,347	98.7	93.2	4,341	4,257	648	653	2,513	2,344
Louisiana Gulf Coast	440	447	109.7	111.5	1,226	1,159	235	295	692	747
No. La. & Arkansas	76	88	76.8	88.9	206	233	52	65	57	80
Rocky Mt., New Mexico (Dist. 3)	14	15	93.3	100.0	51	50	7	7	12	12
Other Rocky Mt. (Dist. 4)	160	151	89.4	84.4	476	470	27	30	207	191
California	875	863	80.9	79.8	2,324	2,181	149	40	1,013	906
Total U. S.—B. of M. Basis Oct. 30, 1948	†5,626	5,556	92.6	91.4	17,569	17,238	2,109	2,077	7,679	7,331
U. S.—B. of M. Basis Nov. 1, 1947	5,224		92.2		15,926		1,903		6,793	

Districts	Residual Fuel Oil Production Week Ended		Total Stocks Kerosine Week Ended		Total Stocks Gas Oil and Distillates Week Ended		Total Stocks Residual Fuel Oil Week Ended		Stocks of Finished and Unfinished Gasoline Week Ended		Per Cent Daily Refining Capacity Reported Week Ended
	Oct. 30	Oct. 23	Oct. 30	Oct. 23	Oct. 30	Oct. 23	Oct. 30	Oct. 23	Oct. 30	Oct. 23	Oct. 30
East Coast	1,551	1,654	11,159	315	25,513	25,534	12,208	12,715	21,730	21,359	99.5
Appalachian (Dist. 1)	65	76	456	50	970	983	454	478	2,231	2,163	89.6
Appalachian (Dist. 2)	102	103	138	19	203	264	196	209	1,073	1,028	100.0
Ind., Ill., Ky.	1,097	1,070	4,776	370	12,414	12,072	6,323	6,358	18,786	18,847	91.5
Okla., Kans., Mo.	554	521	1,545	161	6,336	6,431	2,931	2,845	8,394	8,335	82.2
Inland Texas	402	416	749	72	1,244	1,231	1,244	1,225	3,204	3,319	75.0
Texas Gulf Coast	1,782	1,691	3,895	653	14,063	13,651	10,431	10,224	15,744	15,495	96.3
Louisiana Gulf Coast	516	561	2,212	295	4,344	4,296	3,533	3,378	5,248	5,438	97.4
No. La. & Arkansas	124	130	486	65	649	679	328	318	2,293	2,110	73.9
Rocky Mt., New Mexico (Dist. 3)	27	28	25	7	58	57	36	35	73	70	23.5
Other Rocky Mt. (Dist. 4)	230	228	331	30	1,572	1,535	943	899	1,730	1,762	79.4
California	2,403	2,749	793	40	14,227	13,558	42,672	42,067	11,419	11,148	87.7
Total U. S.—B. of M. Basis Oct. 30, 1948	8,853	9,227	26,565	2,077	81,593	80,291	81,299	80,751	*91,925	91,074	91.2
U. S.—B. of M. Basis Nov. 1, 1947	8,364		22,566		62,749		57,259		**82,092		

Unfinished gasoline stocks included are: *8,699,000 bbls.; **7,931,000; † includes 353,000 bbls. of foreign crude.

U. S. Crude Oil Production

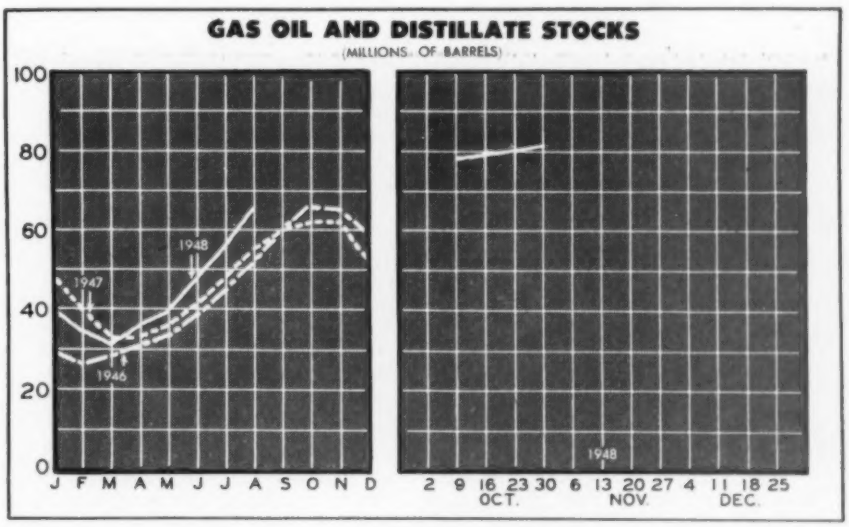
(American Petroleum Institute figures)

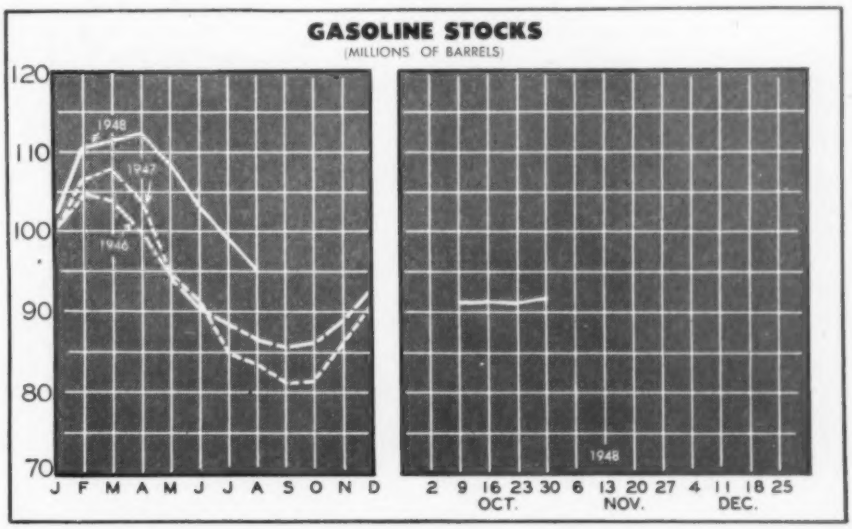
	WEEK ENDED Oct. 30 Barrels (Daily Average)	Oct. 23 Barrels (Daily Average)
*New York-Penna	48,050	46,000
Florida	50	1,000
*West Virginia	7,800	8,000
*Virginia	100	100
*Ohio—Southeast	6,800	6,550
Ohio—Other	2,500	2,200
Indiana	25,350	26,000
Illinois	182,000	178,800
Kentucky	24,500	24,000
Michigan	42,650	48,700
Nebraska	** 350	350
Kansas	** 306,600	306,950
Oklahoma	435,200	434,450
Texas:		
District 1	28,500	28,500
District 2	179,700	179,700
District 3	504,550	504,550
District 4	254,300	254,300
District 5	51,250	51,250
East Texas	301,500	301,500
Other District 6	121,800	121,800
District 7-B	57,700	57,700
District 7-C	47,850	47,850
District 8	728,950	728,950
District 9	142,400	142,400
District 10	88,500	88,500
Total Texas	2,507,000	2,507,000
North Louisiana	112,300	112,950
South Louisiana	368,300	368,300
Total Louisiana	480,600	481,250
Arkansas	79,750	81,200
Mississippi	129,250	126,350
Alabama	1,350	1,450
New Mexico—Southeast	133,100	133,100
New Mexico—Other	400	400
Wyoming	161,350	157,150
Montana	25,650	26,200
Colorado	48,700	48,550
California	954,100	950,200
Total U. S.	5,604,100	5,595,950
*Penna Grade crude incl.	62,750	60,650

Estimated production (in b/d) of lease condensate mixed with crude and moved in crude pipe lines (not included in above tabulation), week October 30:

Arkansas	4,650	Texas Inland	9,200
No. Louisiana	2,300	Texas Gulf	12,700
Louisiana Gulf	13,300	Wyoming	200
Mississippi	2,450	California	3,050
		Total	47,850

** Okla., Kansas, Neb. figures are for week ended 7 a.m. Oct. 28, 1948.





About Oil People

Young Jobbers

Chris Faye, although not yet 22 years of age, is supervisor of retail sales for the Mid-West Service Co., Mankato, Minn. He first joined the company two years ago in its office, but has only been with Mid-West on a full-time basis since completing his college education earlier this year.

Mid-West, which recently moved its headquarters from Algona, Iowa, to Mankato, operates under a Mid-Continent Petroleum Corp. franchise with 14 bulk plants and 35 service stations. These facilities include recent additions of a bulk plant and service station at Elmore, Minn., a new bulk plant at Luverne, Iowa, and a new one-stop station at Mankato. Mid-West also has added eight new trucks to its fleet.

Chris, since graduating from the University of Illinois with a Bachelor of Science degree, which includes a major in industrial administration, has been on the road for Mid-West, carrying out his duties of increasing service station sales. Most of his efforts, Chris reports, are directed toward improving station merchandising, driveway selling, lubrication procedure (with emphasis on the follow-up system), station housekeeping and bookkeeping. He hopes to be able to make these principles work in seven counties surrounding Mankato where Mid-West has a franchise to operate, but where expansion is currently being held up by product shortages.

Mr. Faye

Chris is a native of Champaign, Ill. Before attending the University of Illinois, he first received an Associate of Arts degree from Bethany Lutheran College of Mankato. Both of his parents were graduated from the University of Minnesota, and his father is a professor at the University of Illinois.

Mid-West, headed by Martin A. Jenson, president and general manager, has been organized since 1926.

Thomas E. Jordan and **John M. Payne** have been added to the staff of the Western Oil & Gas Assn. Mr. Jordan, economic analyst, is to work on highway finance, taxation and other statistics, and Mr. Payne was made an ordnance field man. Both men are World War II veterans.

° ° °

Charles K. Slack, assistant treasurer of General Petroleum Corp., is new vice president of the Tax Executives Institute. He was elected at the annual convention of tax men last month.

° ° °

Three new trucks have been purchased by **E. E. Houston,** owner of Tri-State Oil Co., Pittsburgh, who also tells of an addition to his warehouse to handle TBA supplies. . . . **W. J. Johnston** is TBA manager of this company, which has just entered its 20th year of operations.

F. Marshall Tarr, manager of refined products in the merchandising department of Standard Oil Co. (Ohio), has taken over as manager of Sohio's Mansfield sales division, replacing the late Carl Baer. In addition to his recent Cleveland post, Mr. Tarr has been with Sohio offices in New Philadelphia, Canton and Cincinnati. He started with the company in 1928 as a service station attendant.

* * *

Joe S. Morris, Allen & Morris, San Antonio, Tex., was elected president of the American Assn. of Oil Well Drilling Contractors during the Eighth Annual Meeting of the group in Houston, Oct. 11-13, attended by more than 800 oil men. Other new officers include: **Frank M. Porter,** Fain-Porter Drilling Co., Oklahoma City, vice president-at-large, and **Louis A. Beecherl,** McDaniel and Beecherl, Dallas, treasurer.

Raymond Rideout, Augusta, Me., newly-elected president of the Maine Independent Oil Marketers Assn., has named the following members to chairman association committees: Finance, **S. R. Ware,** Rockland; Membership, **Frank Lathe,** Hallowell; Safety, **George Scott,** Belfast; and Legislative, **Fred McKenney,** Lewiston.

* * *

W. C. Taylor, southern division material and traffic manager of Interstate Oil Pipe Line Co., was given a dinner recently in Shreveport, La., honoring his 40 years of continuous service with affiliates of Standard Oil Co. (N. J.) . . . **Loren F. Kahle,** Interstate president, presented Mr. Taylor with the traditional gold service button bearing three diamonds.

* * *

Paul B. Whitney, newly-appointed assistant on production problems to the Director of Interior's Oil and Gas Division, is widely known throughout the oil industry as a geologist and seasoned, experienced production man. One of his proudest boasts concerns the time when, as president of the Wolverine Natural Gas Co. of Michigan, he drilled 56 successive producing oil wells in the Walker Field without a single dry hole. Whitney's career, beginning in 1915 when he was graduated by the University of Colorado, includes a term with Continental as chief geologist, then with Sinclair in the Rockies, with Texaco in California, with George H. Getty in charge of exploration. More recently, following his connection with Wolverine, he has been engaged in a private consulting practice.

* * *

John E. Reed, drilling superintendent in Orcutt, Calif., for Union Oil Co. of California, received special honor at a recent party for employes with service records of 35 years or over. Mr. Reed is the first Union Oil employe to compile 45 years' service.

* * *

Father and son, **George F. Taylor, Jr.,** and **Sr.,** of Taylor Oil Co., Somerville, N. J., report that TBA business is picking up rapidly after taking over a distributorship about 10 months ago. They have replaced two older, smaller trucks with two streamlined over-the-engine models of 1,600 gals. each. Father and son are chairman and vice chairman, respectively, of Somerset County Petroleum Industries Committee.

you get more work out of Mack Trucks

Work done on the job is the one true measure of truck value. McKales, Inc., who operate 23 super service stations in San Francisco and Seattle, find that Mack trucks give full measure—and more—in extra work, enduring reliability and rock-bottom maintenance costs. They write: "We are exceptionally pleased with the performance of this Mack truck. It has ample power and flexibility...handles its 4000-gallon loads over steep hills with ease and economy."

because...we put more work into Macks

True Dynamic Crankshaft Balance assures smooth running and prolonged bearing life. This highly sensitive balancing machine determines exact adjustments needed in the counterweights for perfect running balance. A calibrated drilling machine then removes metal from the weights as electrically indicated and the final result is again checked.

Mack

Trucks for Every Purpose

Mack Trucks, Inc., Empire State Building, New York 1, New York. Factories at Allentown, Pa.; Plainfield, N. J.; New Brunswick, N. J.; Long Island City, N. Y. Factory branches and dealers in all principal cities for service and parts. In Canada, Mack Trucks of Canada, Ltd.

SINCE 1900, AMERICA'S HARDEST-WORKING TRUCK

6220-S

ABOUT OIL PEOPLE

J. Doyle Settle, secretary of the American Assn. of Oilwell Drilling Contractors and director of the group's industry-wide safety program, recently was elected head of the newly-created Drilling and Exploration Safety Group in the Petroleum Selection of the National Safety Council.

* * *

Frank R. Long, vice president of Mohawk Petroleum Corp. and president of Frank R. Long Development Co., has been named to the board of trustees of West Coast University, an engineering institution that keys its study schedules with afternoon employment in allied industries.

Fred E. Verona, head of Verona Oil Co., Roscoe, N. Y., reports the opening of a sub-plant at Grand Gorge, N. Y. Company also has purchased three new trucks—one a 3,-140-gal. tractor-trailer unit. Mr. Verona is past president of the Kiwanis Club, president of the Chamber of Commerce, and director of the Sullivan County Health Assn.

* * *

E. R. Comer, who has been an oil jobber for more than two years now—as head of Comer & Son Oil Co., Melrose, N. Mex.—keeps quite busy as head of the local Chamber of Commerce, secretary of the hospital board, and a member of Rotary and the American Legion.

Mr. Tanham

James Tanham, vice president of The Texas Co., has been elected chairman of the board of the National Safety Council. Mr. Tanham, who is also chairman of the executive committee and board member of the Greater New York Safety Council, has been active in industrial relations for the past several years. During World War II he was chairman of the industry members of the War Labor Board.

* * *

Philip H. Moore, partner in the firm of Moore & Barrett, petroleum technologists, Whyteleafe and Surrey, England, is en route to the U. S. to take charge of the New York office of Moore, Charlton & Associates, Inc., a group specializing in the building of refineries and general petroleum consulting work.

* * *

E. M. Davis, president of E. M. Davis Oil Co., Chicago, estimates that recent land purchases and building additions, as well as previous new tractor and trailer purchases, represent an investment of $125,000 by the company during the last two years . . . **Walter Wendt** and **Frank Miller, Jr.,** both moved from station manager positions at Davis Oil to outside salesman and supervisor of stations, respectively . . . Secretary of Davis Oil is **N. Anderson.**

Another Illinois jobber, **R. G. Hinch,** is marking his 25th year as president of Consumers Oil Products Co., Marseilles . . . **J. R. Hinch** is vice president of the company and **Joyce Pomatto,** secretary.

* * *

One new 1,000-gal. tank truck and a 12,000-gal. storage tank have accelerated operations of National Petroleum Products, Inc., Wentzville, Mo. Company is headed by President **Edwin Wessler.**

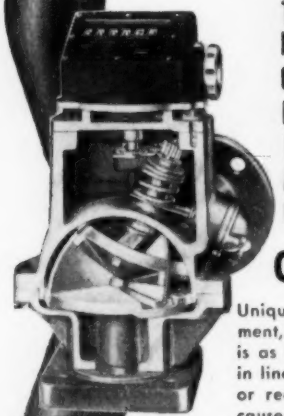
* * *

E. H. and **Loretta H. Lohr** are a husband and wife partnership operating Lohr Petroleum Co., Columbus, Nebr. They recently purchased a 735-gal. country tank wagon, a 17,-000-gal. fuel oil storage tank and two units for servicing aircraft. Mr. Lohr, who is president of the local Chamber of Commerce, is also on the board of the Columbus Building Corp. a local group building homes to ease the housing situation. Mrs. Lohr is equally active civically, serving on the Industrial Committee Board and as vice president of the local fire department.

HOW TO MAKE UP YOUR MIND ABOUT METERS

Naturally, you want a meter so nearly perfect you can put it on the job and forget it. Here are the features an outstanding meter should give you:

TROUBLE-FREE OPERATION . . . . . ✓ Granco
FAST DELIVERY . . . . . ✓ Granco
GUARANTEED ACCURACY . . . . . ✓ Granco
LONG SERVICE . . . . . ✓ Granco
LOW INITIAL and MAINTENANCE COST . . ✓ Granco
ACCURATE PERFORMANCE at all VISCOSITIES ✓ Granco
QUICK, EASY CALIBRATION . . . . . ✓ Granco



ONLY GRANCO HAS THEM ALL!

Unique rotary action and fewer working parts give precise measurement, trouble-free operation and longer life. GRANCO Meter action is as simple as a mill wheel turning in a brook. Rotor turns directly in line of flow with friction-free "feather weight" action. No eccentric or reciprocating movements to interrupt the smooth flow of liquid, cause slippage or turbulence in the metering chamber. GRANCO Meters have an extremely low pressure drop. Easy, accurate calibration. Dial on outside of meter tells you how at first glance.

THERE'S A GRANCO METER TO FIT YOUR NEED

See your distributor, or write today for full particulars. GRANCO sales and service throughout the nation.

Granco

GRANBERG CORPORATION
Oakland 8, California

Also makers of Granco Rotary Positive Displacement Pumps

Mr. McNay

Allison J. McNay, recently named supervisor of Standard Oil Co. of California's newly-created education division of the public relations department, has begun working on a long-range program of developing educational material on petroleum and the oil industry for use by students and teachers from the first grade up to college. Mr. McNay was assistant supervisor of audio-visual aids in the Los Angeles School Department.

* * *

Several Texas Co. men came to Memphis to see the Trans-Arabian Pipe Line Co. film "Desert Venture" shown to the Tennessee Independent Oil Men's convention Oct. 26. They included **Leslie Payne,** district manager for Texas at Nashville; **J. M. Doss,** division manager from New Orleans, and **C. B. Barrett,** southern territorial manager from Houston. **B. E. Hull,** Trans-Arabian president, who showed the film and talked briefly on Middle East crude in relation to world oil markets is also a vice president of Texas Co.

* * *

C. A. Johnson, Holly Development Co., has been re-elected southern California vice president in the Independent Petroleum Assn. of America. **W. C. Whaley,** Barnsdall Oil Co., was re-elected to the group's executive committee.

* * *

W. F. Taylor, president of Illico Independent Oil Co., Lincoln, Ill., tells of company plans to build a new office and general warehouse during the next year. Company officers include: **M. B. Kimball,** vice president, and **D. J. Taylor,** secretary.

* * *

Shell Oil Co. people in the news: **R. C. Byars,** personnel and industrial relations manager of the midland exploration and production area since 1946, has been made administrative assistant to the manager of the area . . . **A. H. Vineyard,** assistant personnel and industrial relations manager for the last three years in the San Francisco office, replaces Mr. Byars . . . **A. S. Gilles,** industrial relations representative in Shell's head New York office since 1946, now is personnel and industrial relations manager of the Tulsa exploration and production area . . . **W. F. Schoenthaler** moved from the position of assistant manager supplies, transportation and supply department of Shell Oil, to manager of the distribution department of Shell Chemical Corp . . . **H. P. Ingersoll,** superintendent of Shell's north products pipe line since 1946, was named superintendent of the Massachusetts product pipe line and the Plantation Pipe Line terminals . . . **V. K. Leonard,** division engineer for north products pipe line since last March, replaced Mr. Ingersoll . . . **D. G. Ward,** assistant manager of the traffic department, San Francisco head office, since 1947, was transferred to New York as an assistant manager-traffic to supervise traffic work of Shell Chemical . . . **John C. Quilty,** manager of head office industrial relations department, has been nominated as one of the two U. S. employer delegates to the second meeting of the Petroleum Committee of the International Labor Organization, specialized agency of the United Nations working for improved world-wide working conditions.

* * *

Ray A. Pentz, previously with the Alton Railroad for 27 years has joined **Carl Saas** and **Fred Schaefer** as a member of Refiners Petroleum Co., Chicago, a petroleum marketing firm.

* *Voluntary statement of Mr. Earl Nelson, owner of service station located at the intersection of highways 45 and 30, Frankfort, Ill. Installation consists of four 320 watt Post-Lites on pump islands and four 160 watt Half-Lites on the building. Super-lighting was accomplished without any increase in the electric bill. Total current consumption is only 1920 watts.*

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Post-Lites are easy to install on present posts. They give you bright, glareless light at your "working level" where you need light—and do away with flash-light servicing.

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ABOUT OIL PEOPLE

Mr. Barrow

L. T. Barrow, vice president and director in charge of exploration for Humble Oil & Refining Co., was elected board chairman to succeed Harry C. Wiess, who died Aug. 26. Mr. Barrow, an Air Corps veteran in World War I, joined Humble in 1924 as a division geologist after instructing geology for two years at the University of Texas. He became chief geologist in 1929, a director in 1937 and was made vice president in 1938.

° ° °

Frank D. Messenger has been named manufacturer's representative for Pennsylvania Refining Co.'s line of motor oils, greases, gear lubricants and specialty products. He is to operate in the lower Michigan peninsula serving highway departments, contractors, equipment distributors and and industrial concerns. Mr. Messenger is also sales manager of Butler Industries.

R. A. Dudley, Sr., president of Dudley-Kimble & Co., Vineland, N. J., reports the remodeling and rebuilding of four service stations at a cost of about $25,000. Company has been organized since 1928 and its present officers include: **W. F. Dudley,** vice president; **W. C. Lockey,** secretary-treasurer; and **J. J. Sainsott,** assistant secretary.

° ° °

New officials of the Tennessee Petroleum Industries Committee are: **G. B. Dickey, Sr.,** American Oil Co. of Tenn., chairman; **J. B. Kelley,** district manager, Gulf Refining, Nashville, vice chairman; **A. W. Wadell,** manager, aviation department, Esso Standard, Memphis, secretary. **Charles C. Gilbert, Jr.,** continues as executive secretary with headquarters at 510 Cotton States Bldg., Nashville.

* * *

T. L. Hodges, Wofford Oil Co., recently became chairman of the Fulton County (Ga.) Petroleum Industries Committee. Vice chairmen include: **L. T. Daughtridge,** Gulf Oil Co.; **R. L. Brooks,** Sinclair Refining Co.; **F. C. Lance,** American Oil Co.; and **Ben Hood,** Hood Oil Co. . . . **T. O. Andrews,** The Texas Co., was named secretary.

Mr. Townsend

Mr. Young

Three district sales managers of Ohio Oil Co. have been promoted: **G. H. Young,** Indiana manger since 1941, was made assistant manager (newly-created post), retail sales department, home office, Findlay, Ohio . . . **J. H. Townsend,** Illinois manager since 1941, replaced Mr. Young . . . **J. P. Hughes,** Kentucky manager since 1938, replaced Mr. Townsend . . . Mr. Young first joined Ohio Oil in 1930 as bookkeeper and service station salesman and managed the Oklahoma and Kansas District prior to taking over the Indiana post. . . . Mr. Townsend, who previously managed the Indiana district from 1936 to 1941, joined the Ohio organization in 1927 when Ohio acquired the Eastern Oil and Refining Co. Muncie, Ind., of which Mr. Townsend was manager . . . Mr. Hughes joined Ohio Oil in 1930 when Transcontinental Oil Co. was acquired by Ohio Oil. He was Transcontinental sales manager at that time and became Oklahoma district manager with Ohio Oil, serving in that capacity until moving to the Kentucky managership. He is a past president of the Kentucky Petroleum Marketers Assn.

Mr. Hughes

° ° °

Gene McCabe, Doc Parsons and **Dart Hoffman,** all of Tide Water Associated Oil, gave a Navy Day luncheon for a bunch of "the guys who shoot the supplies" at the Whitehall Club in New York. Guests included: **Ralph Fowler,** Arabian-American Oil; **John Walstrom,** Asiatic Petroleum; **Mac MacKrille** and **Al Doane,** Shell; **Jack Walsh** and **Red Gildersleeve,** Esso Standard; **Norman Keith,** Petroleum Export; **Joe Joiner,** Maritime Petroleum; **Ed Pruitt,** Pruitt Petroleum; **Floyd Butt,** Sun; and **Pete Mosher,** NATIONAL PETROLEUM NEWS. All these men were formerly either with Army-Navy Petroleum Board or the Navy's Fuel Division.

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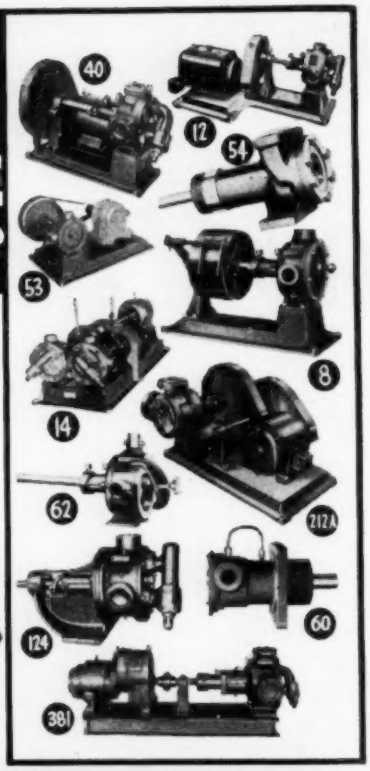

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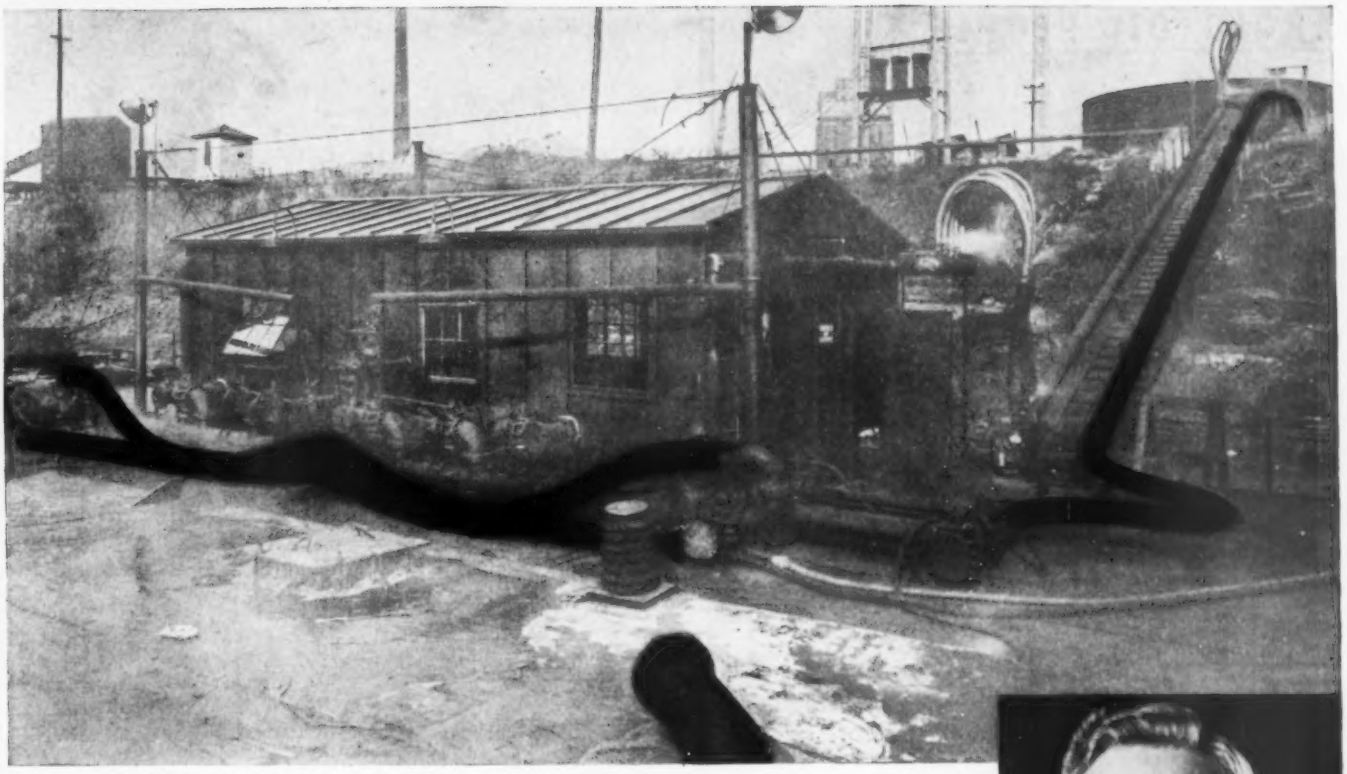

Handling HOT oil is tough on hose ...but not when it's made of NEOPRENE

Fuel oil alone is unusually hard on ordinary hose. And heat, too, is very destructive. Yet at this terminal, the hose withstands exposure to *both* oil and heat . . . because it's made of Du Pont neoprene.

Over 100 million gallons of oil are handled annually here, and every gallon flows through neoprene hose several times on the way to and from tanks and equipment. And to speed up the flow of oil in cold weather, the oil is heated to temperatures of 125° to 140° F. That's why the engineers of Allied Oil Company specified hose with the *built-in* protection of Du Pont neoprene.

Inside this smooth-bore hose, the neoprene tube withstands constant contact with oil and heat. It won't disintegrate and allow soft mushy spots to develop.

The excellent properties of neoprene show up wherever operating conditions ruin ordinary rubber. So if you have a hose problem, contact your supplier for details about neoprene. He'll be able to supply a neoprene hose built to your exact requirements.

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BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

"Tough operating conditions at our terminals would make short work of ordinary hose—but *neoprene-protected* fuel oil hose combines the properties that pay off in long, economical service," says C. M. Johnson, Chief Engineer of Allied Oil Company, Inc.

FREE! THE NEOPRENE NOTEBOOK— Interesting stories . . . new, unusual applications of neoprene. Write . . . E. I. du Pont de Nemours & Co. (Inc.), Rubber Chemicals Division U-11, Wilmington 98, Delaware.

Tune in Du Pont "Cavalcade of America," Monday nights—NBC coast to coast.

SPECIFY HOSE MADE OF

NEOPRENE

The rubber made by Du Pont

ABOUT OIL PEOPLE

Gov. William P. Lane, Jr. of Maryland (left) presents the Maryland Traffic Safety Commission's Award of Honor to Henry A. Rosenberg (right) Crown Central Petroleum Corp., while William H. Bishop, commission official (center), looks on. Award was won by Crown Central for its efforts in helping to reduce the Maryland motor toll. Crown Central's campaign was carried on through issuance of safety tags for license plates, and through outdoor posters, window cards, newspapers and radio. Company's contributions won letter of praise from the National Safety Council

Several promotions have been made in Pure Oil Co.'s transportation and supply division: **Victor H. Bowman,** in addition to his duties as manager of the products supply and contract departments, has been made general manager of crude oil purchasing and product supply. He has been with Pure Oil for 23 years. . . . **Joseph W. Meehan,** vice president of Pure Transportation Co., was placed in direct charge of operations and also will head operations of Pure Oil's other pipe line subsidiaries. He is a 16-year veteran with Pure. . . . **Anker L. Christy,** 20 years with Pure and transportation engineer in charge of transportation engineering, is now also director of project planning and liaison work in transportation and supply. . . . **Walter F. Hagestad,** a 14-year veteran, now has the title of general manager of the marine and terminal divisions in charge of operation of the company's barges, tankers, contract transport trucks and technical training. . . . **Fred Steingraber** was placed in direct charge of Pure Oil's terminal division. He has been with the company for 13 years.

* * *

F. W. Vaughan, manager of the aviation department of General Petroleum Corp., was named to the API's Aviation Technical Service Committee.

* * *

A. E. Johnson, president of Johnson Super Service, Inc., Price, Utah, has retired as manager of the company but remains as policy maker and counselor. **M. A. Johnson,** secretary, has taken over the management of this 20-year-old business. . . . **R. E. Johnson,** vice president, is now with the U. S. Agriculture Department in Mexico. . . . The company recently rebuilt and remodeled a service station in Price, adding home and auto supplies to its line. The bulk plant was increased by 48,000-bbls. storage. New pumping facilities and reinforced concrete, fireproof loading rack were completed.

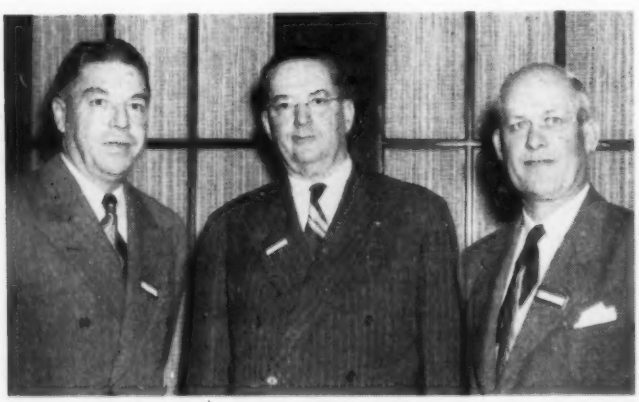
* * *

B. R. Jackson, American representative for Anglo-Iranian Oil Co. for 14 years, was named to the board of directors, succeeding Sir Warren Fisher who died recently. Mr. Jackson's successor has not yet been named, and he will not return to England for several months. A law graduate and native of Newfoundland, he joined Anglo-Iranian following his discharge from the British service after World War I. He was Anglo-Iranian's representative here from 1930 to 1934 when he embarked on an extensive Far Eastern tour. After a period in London, he returned to America and remained ever since. Admittedly reluctant to leave America, Mr. Jackson reports that the Western Hemisphere will be in his particular field in his new position.

Mr. Jackson

* * *

Leo Newfarmer of Houston was named to succeed **Dr. M. G. Edwards** as Shell Oil Co.'s chief geologist in the Pacific Coast territory. Dr. Edwards is to retire Dec. 31 after nearly 25 years service.



Re-elected officers of the West Virginia Petroleum Assn. that met at Daniel Boone Hotel, Charleston, Oct. 21, include: (left to right) vice president L. S. Salisbury, Pure Oil Co.'s West Virginia state manager, Parkersburg; president Ralph D. Lowe, vice president in charge of sales, Elk Refining Co., Charleston; and executive secretary, Francis C. Farley. Executive and general committees of association were also re-elected at eleventh annual convention attended by record total of some 200 oil men

ADVERTISERS' INDEX

This index is published as a convenience to the reader. Every care is taken to make it accurate but National Petroleum News assumes no responsibility for errors or omissions.

Ansul Chemical Co.	46
Blackmer Pump Co.	6
Black, Sivalls & Bryson, Inc.	Facing pg. 32
Bowser, Inc.	37
Chrysler Corp. and Divisions	36
DuPont de Nemours & Co., Inc., E. I.	79
Ethyl Corp.	1
General American Transportation Corp.	43
General Motors Corp.	25
Gilbert & Barker Mfg. Co.	Outside Back Cover
Globe Union, Inc.	34
Granberg Corp.	76
Graver Construction Co.	28
Graver Tank & Mfg. Co., Inc.	56
Hewitt Rubber Division Hewitt-Robins, Inc.	47
Hotel Mayfair	37
International Harvester Co.	55
International Lubricant Corp.	38
Kim Hotstart Mfg. Co.	61
Long Co., W. H.	77
Lundstrum & Skubic, Inc.	50
Mack Mfg. Corp.	75
Milwaukee Valve Co.	40-41
National Cash Register Co.	4
Oil Equipment Mfg. Co.	51
Pennsylvania Grade Crude Oil Association	53
Prest-O-Lite Battery Co., Inc.	22
Richmond Oil Equipment Co., Inc.	2
Robins Conveyors Division Hewitt-Robins, Inc.	47
Rohm & Haas Co.	8
Shell Oil Co.	59
Skelly Oil Co.	62
Socony-Vacuum Oil Co.	Inside Back Cover
Stewart-Warner Corp.	49
Tokheim Oil Tank & Pump Co.	Inside Front Cover
Trailmobile Co.	31
Union Pacific Railroad Co.	45
Viking Pump Co.	78

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. . . and what it Brought . . .

. . . the Food, the Guests, even the Candles!

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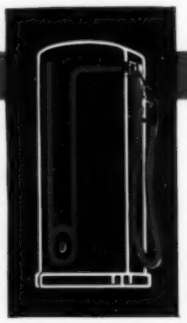

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